New Chalk Talk
CLT Newsletter (September 2002 - September 2017)

Celebrating 15 Years of Promoting Excellence in Teaching and Learning
Center for Learning & Teaching

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New Chalk Talk
September 2002 - September 2017

In celebration of

15 years of promoting excellence in teaching and learning at AUC
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This year we are celebrating a major milestone at our Center for Learning and Teaching (CLT) — September 2017 marks our 15th anniversary. It also marks the 15th anniversary of our newsletter, New Chalk Talk. Of all the numerous activities of our center, it seems befitting to start our celebration with the publication of this collection of 150 issues of New Chalk Talk.

When CLT was established in 2002, we were only three people working at the center: an administrative assistant, a young AUC graduate interested in developing instructional materials, and myself. With this small staff, a bi-weekly newsletter seemed to be the most efficient way of reaching out to as many faculty as possible to introduce CLT and its raison d'être, and to start a conversation on campus about issues of pedagogy, the role of technology in higher education, and assessment and learning.

The immediate feedback of AUC faculty was very positive, and early comments captured the goal of the newsletter well. One instructor wrote, “Today I started a “Chalk Talk” file. The format is great: clear, simple and readable for academics on the run. Bravo.” (D. Blanks, email Sept. 24, 2002). Another noted, “Thank you for creating the very illuminating (and fun to read) newsletter, “Chalk Talk.” (A. Elshimi, email Dec. 24, 2002).

Three months after the launch of the newsletter, we knew we had a successful formula which needed to be sustained. We encouraged faculty to share some of their experiences, thoughts, experimentation, methodologies, and/or interesting insights with the community. Many did, and these are included in this publication.

From its founding, CLT sought to address issues of faculty development that teaching centers in the US and Canada were dealing with; namely integrating active learning strategies and technology into traditional teaching and learning settings, supporting formative assessment and offering course design and redesign consultations.

In 2002, preliminary talks with faculty showed that their main concern was the time needed to learn and use new technologies. CLT responded by launching the Student Technology Assistant (STA) program, modeled after similar programs in the U.S. STAs are students, trained by CLT staff to assist faculty members in the appropriate use of technology in their courses, which included anything from the effective use of the learning management system (Blackboard or Moodle) to exploration of video capture, student response systems, and web 2.0 technologies such as blogs, wikis and e-portfolios. The satisfaction rate of faculty with the STA program has consistently been high, mostly because of its one-on-one nature, which takes place at the professors’ own pace and based on their personal schedules.

Over time, we experimented with different approaches to delivering programs and services to faculty. Beyond the newsletter and the STAs, faculty development workshops and individual consultations were an important vehicle for encouraging reflective and innovative teaching, as was receiving formative student feedback on teaching through mid-semester
surveys and small group instructional diagnoses (SGIDs). Additionally, CLT was involved in some institutional assessments such as assessment of the English Language Instruction program, the new Rhetoric and Composition/Core curriculum tandem courses, and a recent assessment of the Business School’s large lecture classes. Annual symposia, where faculty members had the opportunity to showcase their innovative practices and/or classroom action research, were one more venue for disseminating pedagogical innovations and creating opportunities for collaboration.

Over the years, we hosted a number of interesting and inspiring teachers and educators, who facilitated workshops and consulted with our faculty. These included Mary Deane Sorcinelli, Associate Provost for Faculty Development, UMass; the late Frank Moretti, founding Director of the Columbia Center for New Media Teaching and Learning (CCNMTL); Joan K. Lippincott, Associate Executive Director of the Coalition for Networked Information; Eric Mazur, physicist and educator at Harvard University; Charles Graham, Professor of Instructional Psychology and Technology; Jon Nixon, philosopher, educator and Honorary Professor, Education University of Hong Kong; David Helfland, astronomer and educator, Columbia University; and more.

We have also held many international conferences and events, the most recent being the 4-day Digital Pedagogy Lab Cairo (March 2016) facilitated by some of the leading and most compelling voices in the field; the first Digital Humanities event ever held in Egypt (September, 2015), and the 2-day Problem Based Learning Institute (April 2017) for our faculty, facilitated by D. Allen and M. Serva from the University of Delaware’s Institute for Transforming Undergraduate Education.

In 2015, the Senate and the Dean of Graduate Studies recommended that CLT develop a compulsory training program for all Teaching Assistants (TAs). Today, this program offers professional development opportunities to both TAs and graduate students beyond their academic studies.

CLT’s programs continued to grow to include a required professional development Teaching Enhancement Certificate for adjunct faculty and new faculty, a six-week blended learning certificate program for faculty interested in teaching in this modality, and instructional design support for blended learning courses as well as MOOCs in the Arabic language. To encourage more faculty participation, CLT also offered professional development certificate “tracks” with five different themes: Active Learning, Web-Enhanced Learning, Assessment, Course Design, and Community-Based Learning.

Today, one of the major initiatives that CLT is involved in is AUC’s Digital Education Initiative. CLT is leading and supporting AUC’s web-enhanced, blended and (proposed) online initiative including MOOCs and Al-Ghurair Foundation/MIT capacity-building program promoting blended and online learning in the Arab region. This requires the establishment of a digital education unit within CLT that is accountable for assessment, implementation process, and operational support of these projects.
Last but not least, one of CLT’s distinguishing features is the continuous professional development of our staff through conference travel, workshops, in-house professional development and mentoring, enabling them to develop expertise in student-centered learning, assessment, classroom action research, and to support faculty in the thoughtful integration of technology to achieve pedagogical goals.

I would like to end by thanking my former manager, Dean Shahira el Sawy, whose continuous support in building CLT and in helping make it what it is today, was invaluable. I would also like to take this opportunity to recognize the many contributions of our dear departed Dr. Pandeli Glavanis, with whom I worked closely for ten years to realize the mission of the CLT.

In marking our 15th Anniversary, CLT has enjoyed many successful years and we look forward to many more to come.

Sincerely,

A. R. El Sawy
Examinations: Are We Really Assessing Our Learning Outcomes?
Ezzeldin Yazeed Sayed-Ahmed, Professor and Graduate Director,
Department of Construction Engineering

I always ask myself this question: am I really fairly and effectively assessing my students’ learning outcomes by examinations? The answer never fails to put me ill-at-ease!

We are placing our students in a tremendous amount of stress pretending to have a successful way of judging who deserves an A or and F based on such a method of assessment: eExams. In my personal opinion, one of the most important criteria of any assessment is the feedback received by the student after submitting the assessment. This feedback allows the student to correct his/her path and do better in his/her learning track. Indeed, what form of feedback other than grades does the student receive after his/her final exam? And how can he/she correct his path; isn’t it too late?

But first let us look at how we currently perform examinations, and I will focus on finals. The extreme case are the final examinations which are offered to large group of students in many of our universities (note: of the following bullets do not apply to AUC). A successful system is adopted for

- printing the exams and submitting them to what is called “control-room”,
- delivering the exam to the students in large examinations halls at a specific date/time,
- collecting the answer sheet and hiding the student’s ID from the instructor,
- grading the exam and returning it to the control-room,
- summing the grades with other year work activities, and
- presenting the final grades to the students.

A successful system which has no objective what-so-ever and just indicates a mistrust in the ethics and integrity of instructors. No feedback, other than grades, is given to the students, and everyone still thinks that this is a very successful method of measuring and assessment; but what does it really measure and/or assess?

Moving to a higher level and talking about what is currently followed at AUC and called final examinations: A specific date/time is pre-set for the instructor to deliver final examinations to the students. Worst case scenario is a closed book examination; and on the other side, we can find what is called a cheat sheet or even an open book examination which may reach what I would call open resources (including computer and internet) examination; but the latter are very rare. Instructor marks these finals knowing the identity of each student, so he/she may have a small margin to account for the semester’s work of the students during marking the final; however, most marking is independently done for the final examination and its grade is just added as a percentage ranging between 20% and 50% to the other course
activity grades. Once again, the same question still holds water: what are we assessing and what do we/our students gain? Do we assess 16 weeks of classes, studying, activities, etc. in 2 to 3 hours which is the time slot of the exam? Do we consider the stress we place on our students for an objective which is actually questionable? Can we recall when we were undergraduate students and we had to go through 2 weeks of successive examinations to pass a year-work; wasn’t that a nightmare? No matter what the answer is to this last question, I will use a quote which I have heard once and always adopt “students are of today, professor are of yesterday”. And even re-emphasize my point using John Dewey’s quote “If we teach today’s students as we taught yesterday’s, we rob them of tomorrow”.

On the path to my proposal which will reveal itself by the end of this article, I have experienced a new paradigm of examining my students which has proven to be very rewarding. Recently, and while attending CLT workshops, I came to believe that what we have learned and excelled-in for some time is now (or will be soon) surpassed by something which works better. Thus, an epiphany which I encountered during one of these workshops led to what I call “students-generated examination”. I have tried it over two mid-terms during two successive offerings (Fall 2015 and Fall 2016) of a construction engineering course called Structural Mechanics, and here is the story.

I agreed with my students that each one of them will submit a mid-term examination with its model answer and marking scheme at a certain date. We specified the topics that should be covered by this examination. We also set the general specifications for the exam paper and I asked the students to clearly indicate distribution of grades to each question based on their model answer and marking scheme. I specified 50% of the student’s mid-term grade would be on designing the exam and its model answer.

Then, at a specified date, the examinations (without the model answer, of course) were randomized and distributed to students. So, every student was asked to solve an examination which was designed by one of his/her colleague and submit his/her answer sheet to me. The exam took the open-book/resource format and the remaining 50% of the mid-term exam grade went to the student’s solution of his/her colleague’s exam.

It was really fun, no stress on the students, relaxed atmosphere, and I have gained a lot from this experience. For example, I knew from the range of items covered by students’ questions which aspects are the most important aspects of my course from the students’ point of view and what were the over-looked or the over-represented topics. I have even learned a lot from the students’ answers to their own questions via the model answer and the marking scheme. This was the strength of such a technique; on the other hand, minor weakness arises which can be easily dealt with in my next application: simply in the unequal examination difficulty levels. This was just a trial among others leading to my ultimate goal: cancelling examination from my courses and replacing them with many other forms of assessment. But, that is another story to tell.
Reflections on End-of-Semester Evaluation
Hoda Mostafa MD, Associate Professor of Practice
Associate Director Center for Learning and Teaching

Anyone teaching in higher education is familiar with the debate around end-of-semester student evaluation. Student participation is often low, student perceptions of the utility of these evaluations can sometimes deter them from actively participating and faculty frustration with the somewhat biased results adds to the dilemma.

Every teacher will have an opinion on how students fill out these evaluations. I have talked to faculty who comment on how students are not properly equipped to assess faculty teaching, ticking boxes without much thought to the questions and what these questions are assessing. I have engaged in many a conversation on how the efficacy of teaching runs deeper than a score, and how comments from students on the same course experience can range from: “this is the best course ever!” “What a passionate instructor, she loves what she does” to “avoid this class”, “too much work for a 100 level class”. These comments can inspire or sting and do little to constructively inform teaching innovation or re-design of course content or workload. Low participation rates and selective participation can result in a sample of outliers, also contributing the often non-representative results faculty receives. In addition, end-of-semester evaluations may be the only artifact in a faculty’s portfolio that addresses teaching and this in itself is problematic.

Using multiple approaches seems to work best¹, selecting from mid-semester feedback, reflective writing tasks, assignments specifically designed for feedback, peer feedback, teaching portfolios with end-of-semester evaluation included as part of the process.

At CLT, one type of mid-semester assessment² that we perform is the Small Group Instructional Diagnosis, which is conducted by a member of CLT and is confidential and anonymous. We ask students 2 questions; “What helps you learn in this course” and “What improvements would you like to see in the second part of the course and how would you suggest these changes be made?”. Students work in groups and must come to a consensus within their small group on how to respond. The CLT member then conducts an all-class discussion allowing time for individual comments. Online Mid-semester surveys can also be designed and administered. When students are encouraged to respond, for example in a lab or on their phones in class, this method of formative assessment may also offer insights that can result in changes the students can see happening in the course as the semester progresses. Sharing results with students builds trust, accountability and discourse, which can be constructive

² Mid Semester Formative Assessment http://ln.aucegypt.edu/services/center-learning-and-teaching/formative-assessment-learning-and-teaching

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when faculty follow-through. In addition, tell your students what can be changed and what cannot and why. Discuss ways of doing more of what helps them learn and try to follow-through with small fixes. Most importantly, incorporate those comments that have surprised you, into your reflective process on how to move forward with your teaching in future semesters.

An additional dimension to counter-balance end-of-semester evaluations is peer feedback. Bringing in a trusted colleague with a bird’s eye view of the course can shed light on teaching habits that are not conducive to the learning environment you aspire to, or create a conversation space that invites peers to share ideas and constructive critique.

Developing multiple approaches with my co-teachers Maha Bali and Aziza Ellozy, we attempt to collect formative feedback in a variety of forms along the semester. Blogs allow students a personal space to share reflections on tasks and learning prompts, our adapted “liquefied syllabus” assignment has students reflect on the course and make concrete suggestions on improvements/re-designs of the course. In addition, we use an end of semester guided reflective piece. This creates a space for students to identify effective learning moments while reflecting on their experiences that could be adapted further for future students. We have also used an assignment where students match activities and assignments to course learning outcomes allowing students to see how the pieces of the puzzle fit into intended learning outcomes and big questions. Reflective E-portfolios also serve as a holistic overview on students’ perceptions of their own learning and their ability to document and represent their learning.

Following is a guideline for a reflective paper or blog post that we use at the end of the semester. These guided questions prompt students’ written reflection on the learning and teaching experience as a whole.

“Write your final reflective blog post and use at least 5 of these questions to guide you. You can include reflections to other aspects not covered in these prompts:

- What helped my learning in this course was…because…
- I would have learned better in the course if…because…
- The activity of assignment that contributed most to my learning is…because…
- The biggest obstacle to my learning was…because…
- Because of this course, I now feel I know/can do…
- Five years from now, I will remember…about this course, because… “

and

“Imagine you are describing the course to someone who knows little about it”

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- Focus on your reasoning behind choosing the particular “thing” (incident, assignment, event) you are using to answer the question. Why did it matter to you, personally?
- Use personal anecdotes, link to previous blog posts, and link to external sources when it will enrich your narrative
- Focus on what has not been visible to the instructors in the course so far - what is happening inside your head and feelings rather than what you have done and shown

This, in itself, is a useful process for the student and an important exercise for faculty reflection. I have never been disappointed as I read their posts. When administered, this can highlight valuable learning experiences as well as areas that need improvement. It can be rewarding to see students identifying with learning in ways you may not have even intended. Keep in mind however that when students are graded specifically on these reflections, they may tend to lose their objective nature and may perceive this as an exercise in writing to the “test” …telling their teacher what they think they want to hear. Ways to work around this is to include multiple reflections throughout the course allowing students to develop a culture of reflection on learning and process. Allow these exercises to melt seamlessly into the course, encourage students to move away from the grading and facilitate moving towards student agency and accountability for learning.

End-of-semester evaluations are not enough. Start slowly and consider one additional exercise that will offer another dimension to how you assess learning in your classroom. You may just start to see learning potential where you least expect it.
Empowering Students through Mentoring

Ghada Elshimi

Associate Dean of Undergraduate Studies, Academy of Liberal Arts

“If he [the teacher] is indeed wise he does not bid you to enter the house of his wisdom but rather leads you to the threshold of your mind” - Khalil Gibran

The word “mentoring” conjures up in my mind images of the young apprentice in a medieval blacksmith’s shop. The young boy observes intently as the craftsman’s strong arms raise the hammer and bring it down to strike the metal rod. Sparks fly. By the end of the day, the deafening sounds of clanging are hardly noticed. Memorable conversations take place in this dark little shop - they talk about the day’s work, the clients and their families, the rising price of coal, and the workshop the boy dreams of having. Days turn into weeks, and the boy feels more and more that he is a part of the metalsmithing community - he has experienced the ups and downs of the trade, has shared his teacher’s challenges and joys, and understands the meaning of hard work and trustworthiness. The craftsman finally steps away from his work. A perfect product has taken shape. He and the boy momentarily lock eyes in celebration. At the end of the apprenticeship term, both individuals emerge changed - the young man is a skilled worker with new ideas for expansion and growth. A master craftsman believes in him, and he will work to make him proud. The older man feels younger - he has connected with a bright young man brimming with energy and ideas; he has given back to his community by training a strong and enthusiastic new member. A timeless bond between generations has been forged.

Definitions of mentoring in the literature abound. Weinstein (1998) defines mentoring as a “power-free partnership between two individuals who desire mutual growth. One of the individuals usually has greater skills, experiences, and wisdom.” In the context of student mentoring, mentors offer individual academic and personal guidance to a student. They help place a young person on the road to a productive professional journey. Mentoring interactions aim to improve the overall academic experience of the student to result in a more meaningful and coherent educational experience.

As educators, all faculty are involved in the informal mentoring of students by virtue of being involved in instruction and advising. Mentoring and teaching are intricately connected. Our philosophies of learning, world views and personalities inadvertently impact students’ processes of learning, development of identity, and setting of academic and career goals. Our students see the world partially through our eyes. It is worth reflecting upon our influence on students, and our potential impact upon them, in order to intentionally design educational environments where they can flourish.

As AUC takes steps to set up a formal mentoring program that would allow interested undergraduate students to be paired with a faculty mentor, it is a good time to discuss the benefits of mentoring programs, and how we can position ourselves to create a program that will be instrumental in providing student support.
Much research documents the benefits of formal mentoring for undergraduate students. These include:

- Increased academic success and retention (Crisp and Cruz 2009; Terenzini, Pascarella, and Blimling 1996; Campbell and Campbell, 1997)
- Better cognitive skills such as problem-solving, and analysis (Cosgrove, 1986; Kardash, 2000)
- Development of skills that help students in the professional world such as long term planning and decision-making (Schlosser, Knox, Moskovitz, and Hill 2003; Cosgrove, 1986; Kardash, 2000)
- Social integration, feeling part of a community, ease of transition to college, satisfaction with educational experience (Cosgrove, 1986; Kardash, 2000)

*Formal mentoring* is an *institutionally-supported initiative* which allows faculty and students to develop mentoring relationships within a structure that assists them to make it most productive. Formal mentoring matches students who desire this service with a faculty member of similar interests. This may take place based on general disciplinary interests, or similar research interests, the latter with the understanding that the faculty and student will work together on common research projects.

The student and teacher become “partners” committed to supporting the student navigate the years of study with purpose, and allowing him / her to personalize the college experience. This takes place through informal conversations and joint activities. The mentoring relationship unfolds as student needs evolve from course-related concerns to longer-term planning, goal-setting, career exploration and personal development. The mentor may coach the student to engage with their course content, to make use of relevant campus events, to seek productive social activities that will broaden their communication and personal skills, and to tap their personal talents and find areas where they can excel. Where research is involved, the student is introduced to the scholarly culture of the discipline, learning about research norms, disciplinary expectations and opportunities for learning and networking. The personal one-on-one nature of the mentoring connection gradually makes it safe for the student to show vulnerability, discuss concerns, perceived shortcomings and fears. The faculty member may show support by sharing similar experiences, opinions, or investigating alternatives and resources with the student.

The goals of mentoring may be summarized as follows:

- Students build a trusting relationship with a faculty mentor outside the classroom to discuss matters of importance to the student
- Students explore learning and development opportunities within the campus and beyond
- Students discuss their academic and career questions, and are pointed to available resources to help support their planning
• Students experience professional and personal growth, demonstrating improved research, industry and communication skills, and increased ethical and civic responsibility.

When students know they have a dedicated faculty advocate on campus, this contributes to their sense of “mattering” (Schlossberg, 1989), a feeling of belonging to the institution, and being an essential part of a community. Mattering empowers students to develop agency in planning and decisions regarding learning, activities and careers; it is critical in building student motivation.

The role of the institution in a mentoring program is to provide an infrastructure for facilitating such relationships by overseeing the logistics of matching mentors to mentees, developing frameworks for identifying strategic learning outcomes and conducting assessments for the mentoring program. In addition, the institution must provide resources and professional development for faculty to learn about best practices and engage in relevant professional development. Incentivizing mentoring for faculty may also be a plus, though mentoring in itself is commonly viewed as having intrinsic rewards for faculty.

A student has come into my office for a quick assignment deadline question, but ends up staying half an hour. The conversation turns to his declaration dilemma, his research paper in another course, and his swimming practice last night. As I chat with him, I think about how much I sound like my favorite undergraduate mentor, whose matter-of-fact belief in my abilities helped me feel that succeeding was never a question, but just a matter of exercising the right skills. And I think about how the work of a caring instructor continues long after the student has left the class.

References

A Snapshot of AUC’s Faculty Use of Blackboard: Are Data Analytics a Measure of Our Faculty’s Digital Literacy?

Aziza Ellozy, Founding Director Center for Learning and Teaching, Associate Dean for Learning Technologies, and Caroline Mitry, Senior CLT Officer, Pedagogy and Assessment

One of the biggest challenges that faculty developers face in the US (Johnson, Adams Becker, Estrada & Freeman, 2014) and elsewhere is to enhance the digital literacy of faculty, and more often than not the benchmark by which faculty measure themselves is by the use of a Learning Management System (LMS).

Last year at the request of AUC’s CTO, Ms. Nagwa Nicola, and of University Academic Computing Technologies (UACT), the CLT conducted an analysis on the use of Blackboard (Bb) by our faculty and students. Because of the very small number of faculty using Moodle, we did not include it in our study. All three parties were interested in evaluating the extent to which Blackboard is used (are we using university resources effectively?) and to see what can be improved.

In addition, CLT was interested in other questions that researchers in the field had been posing about the LMS, namely:

a) Does the LMS enable learning or does it simply enable the administration of learning?
b) How effective is the LMS in the service of learning and teaching?
c) To what extent are its more advanced features used by instructors?
d) Could we get information/insights regarding the digital know-how of our faculty by following their digital footprints as measured by data analytics from Blackboard?
e) How do we compare with US faculty as reflected by recent studies?

In this newsletter we summarize how we tracked and analyzed Blackboard data usage of both faculty and students over a period of two semesters (F2014 and S2015) and how we attempted to answer some of the questions posed above.

What Does Research at US Universities Tell Us?

We chose to concentrate on the comprehensive research undertaken by the Educause Center of Analysis and Research (ECAR) in 2014 (Dahlstrom, Brooks & Bischel, 2014) which surveyed 17,000 faculty in 151 institutions in the US and more than 75,000 students from 213 institutions. They found that while 85% of faculty use an LMS, only 41% report using it “to promote interaction outside the classroom”.

They also found that:

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5 At AUC, Blackboard and Moodle are the two LMSs used
Faculty and students value the LMS as an enhancement to their teaching and learning experiences, but relatively few use the advanced features and even fewer use these systems to their fullest capacity;

User satisfaction is highest for basic LMS features and lowest for features designed to foster collaboration and engagement;

Faculty say they could be more effective instructors—and students say they could be better students—if they were more skilled at using the LMS; and

Students and faculty want the LMS to have enhanced features and operational functions; be personalized; and use analytics to enhance learning outcomes.

Our Approach and Methodology
We collected quantitative data from Bb analytics but found that we needed to use more qualitative methods in order to answer some of our questions. So in addition to the Bb data analytics

a) We conducted two focus groups with a total of twelve faculty members from different schools: six sciences/engineering faculty and six non-science faculty. Seven of our participants were female and five were male. Our sampling was purposive and we chose the participants because we knew that 1) they were interested in pedagogical innovations, 2) they integrated technology in their classrooms, and 3) they were using or had used Bb

b) We also conducted a survey of faculty during a specific workshop (“Technology to support good practice in undergraduate education”) held eight times in the spring of 2016. In these sessions, the percentage of adjuncts was higher than usual. Participants responded to the open-ended question “When, why and how do you use technology?” using a web-based Personal Response System, “Nearpod”, through their mobile devices or computers. We collected the responses of 182 faculty. These responses were coded and divided into categories by the authors and patterns/trends were identified.

Results and Discussion

- Although Bb provides data analytics within a course, AUC does not have the institutional Bb data analytics tool (according to UACT, it is prohibitively expensive). We therefore had to resort to accessing and analyzing data collected by UACT locally for F2014-S2015. Organizing, analyzing, and interpreting this data proved to be a very tedious, slow and cumbersome manual process. It required the effort of three CLT staff members who devoted many days doing this (and that was just for two semesters!)

- In a day and age where Big Data in education is becoming an important tool for strategic decision making, not being able to efficiently access information about institutional use of the LMS is a disadvantage.

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6 Credit goes to Azza Awwad, Caroline Mitry, and Maha Shawki from CLT. A big thank you!
Conclusions

- Institutional data is not readily available and accessing, analyzing, visualizing and interpreting it is a slow and cumbersome manual process.
- Bb is underused by our faculty: advanced features are not used mostly because faculty do not know they exist or because they find them cumbersome.
- Faculty who are more digitally savvy are satisfied to use the basic features of Bb but go to other tools for student collaboration and engagement.
- LMS analytics are not an indication of digital know-how of faculty.
- Although not totally satisfied with the LMS, AUC faculty are reluctant to change unless a new LMS offers significant advantages.

Use of Technology

Results of open-ended questions and Blackboard data indicate that a low percentage of AUC faculty use technology to promote student collaboration and engagement.

References

Data Driven Visual Communication:
A Data Literacy Framework

Doris Jones
Senior Instructor, Department of Rhetoric and Composition Director, Common Reading Program

Advances in information and communication technologies have created a surge of interest in data literacy visualization courses for their potential to help students critically interrogate, design and communicate complex information effectively (Osterman, 2013). This rise in data literacy has also been influenced by the increasing availability of data visualization tools (Lankow, et al., 2012). For some time, news organizations have been at the forefront of compelling storytelling using data visualizations that help direct an audience to key details in news reports by eliminating clutter (Knaflic, 2015). Research also shows students who are visual learners process and retain information more effectively when they can see material in graphic forms (Felder & Solomon, 2000). These findings have further accelerated questions within higher education about the pedagogical benefits data visualizations can contribute to advancing digital literacy while also promoting competency-based education programs. This article examines lessons learned from teaching the Pathways II Seminar 1099 course “Now You See It – Digital Competencies and Visual Literacies” which is designed to help students understand visual culture through the acquisition of cognitive skills and critical vocabulary in order to critique and design data visuals that often reveal new discoveries and experiences about a world saturated in data.

Teaching Case Study

Now in its second semester, the Seminar 1099 course “Now You See It”, tasks 20 students, who are predominantly science and engineering majors, with assignments ranging from (1) critical reading responses about infographics and data visualizations; (2) rhetorical analysis of contrasting visuals; (3) story-mapping using infographics and data visuals; and (4) critical examinations of misleading data visuals. These assignments were designed with guidance and assessment criteria developed by Denison University President, Adam Weinberg, whose article “Data Analytics and the Liberal Arts” (2016), recommends four critical criteria for the creation of data visualization courses:

1. **Framing Questions**: Too often, we get the right answer to the wrong question. The ability to frame questions is probably the most important role of a liberal arts background in learning to use big data effectively. If we get the question wrong, the answer is irrelevant.

2. **Working in Teams**: Both the framing of questions and data analysis often will require working in interdisciplinary teams, comprising people who see the world differently. Data analytics will need people who can harness the inherent strength of teams with diverse backgrounds.

3. **Communicating Results**: Findings need to be communicated well. In other words, technically sophisticated results need to be communicated to top executives in ways that they can understand and make use of in order to reach informed decisions based on facts.
4. **Ethical Decision-making**: In today’s world, we have access to data that we may or may not want to use. These lines are just starting to come into focus. For data analytics to drive us forward, we need a generation of people shaping the field who see, acknowledge, and grapple with ethical concerns, especially as they relate to issues of privacy and civil liberties. (AAC&U Weekly Liberal Arts News Watch, 2016).

Weinberg’s recommendations are further supported by a rationale for data visualization education design using a “soft systems methodology” (Checkland, 2000), which claims:

. . . complexity of human affairs is always a complexity of multiple interacting relationships; and pictures are a better medium than linear prose for expressing relationships. Pictures can be taken in as a whole and help to encourage holistic rather than reductionist thinking about a situation (Checkland, 2000, p. 12).

Based on these pedagogical frameworks and two semesters experienced with teaching the course, the following insights have emerged to foster and improve digital and visual literacy instruction:

- Since course design involves trial and error, placing students in teams to examine and design infographics and data visuals have proven most effective.
- Since data visualization can provide students with the ability to comprehend huge amounts of data, it is important to design assignments with measurable learning outcomes.
- Since a variety of tools exist to create infographics and data visualizations, time must be invested in examining these tools, which can be strategically linked with assignment designs. Consultations with CLT Instructional Technologists have proven most beneficial in this area.
- Since data visualization requires that the data itself is accurate to achieve “fidelity” in storytelling, students must learn how to critically interrogate datasets that are misleading. This is an important skill set because it allows students to understand the social, political and economic factors, which shape how data is collected. (See Figure 1 below).

![Diagram](https://example.com/data_visualization_diagram)

**Figure 1. General flow for data visualization**

A formative assessment of the Seminar 1099 course is planned for the spring 2017 semester. The formative assessment will encourage more evaluative needs for students and incorporate current trends and technologies for the creation of a critical curriculum design. Such an assessment will also allow for an examination of how the course encourages the development...
of cognitive processes in students and academic rationalism that helps them choose courses that are worthy of study. Based on current in-class discussions and written reflections about the course, overall consensus from students has been positive. In many cases, students have commented that learning to interrogate, interpret, and design with complex data, is enabling them to communicate with greater efficiency. Furthermore, as employers demand more competency-based skills from college graduates, institutions of higher learning are tasked with designing courses to leverage employer needs. Infographics and data visual communication courses represent a new approach to curriculum design with learning outcomes created to help students identify ambiguity, indecisiveness, and misleading information in a world that is engulfed with data.

References
Tips for Inclusive Teaching

Maha Bali, Associate Professor of Practice, Center for Learning and Teaching
and
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It started with a blogpost Maha wrote about how we often reproduce marginality in open online spaces (Bali, 2016a). This got Steve thinking about ways of being more inclusive in regular classrooms, and our discussion led to some of these (non-comprehensive) tips for creating classroom atmospheres that are inclusive of students who are minorities, uncomfortable speaking in class, or non-native speakers. It is important for the instructor to determine what the problem is for each particular class. Are some students uncomfortable speaking because they have little experience doing so? Are they afraid that they will have nothing substantive to contribute, or that others will think what they have to say is silly or incorrect or stupid? Do they think they won’t fit into the group because their experiences are different from the others? Each of these problems can be addressed by the instructor.

1. **Reflection/writing time** before speaking time. Some students who are more reflective (or non-native speakers who need time to put their thoughts into sentences) can benefit from opportunities to stop and write before the discussion is opened up to the whole class. This is, of course, unless extemporaneous conversation is a key learning goal for your class. In Steve’s experience, all students are more comfortable speaking when you’ve asked them to write first, because it quite literally gives them something to say. The writing can be assigned before as homework, but due at class time. Or you can ask them to take 1-5 minutes in class before you start discussion. This also allows quiet students to “compete” with dominant personalities.

2. **Small group vs large group.** Shy and minority students may feel more comfortable speaking up in smaller groups rather than larger groups. However, as a teacher, it may be wise to walk around and listen in – occasionally one very dominant personality in a small group conversation can silence others. It is always important to remember that when we let go of some of our authority as teachers, other power dynamics remain in the room, based on race, class, gender, sexuality, ability and yes, even just personality. Dominant personalities come in (at least) two types: Students who regularly have something interesting and substantive to contribute, and students who dominate because they like talking, they like being the center of attention, or they really want to get whatever points are available towards a grade for class.
3. **discussion.** One way to address the latter is speaking to them outside of class and telling them, while their enthusiasm is great, we also need to give other students a chance to speak. Steve suggests they might like to wait before speaking to give other students a chance. If they do so, other students will often say what they had wanted to contribute. The former type of students are more challenging because you don’t want to shut them up. Fortunately, the same approach of speaking to them outside class also works. In fact, these students tend to be more receptive than the other group to allowing others to speak first. One approach to these students is to provide a limited amount of time for each student to speak (although Maha finds this problematic as less fluent speakers usually need more time to say the same thing). Steve usually starts the term by pairing students up and asking them to spend a few minutes introducing themselves, and then coming back together and asking each student to introduce their partner. This creates the precedent that every student will have a chance to speak. He tries to pair students with similar personalities to start: dominant speakers together and quiet students together.

4. **Recording vs Presenting Option.** Unless public speaking is an essential element of your class, you can give students the option to record a video instead. Steve says UMW’s Speaking Center offers the facilities for students to practice presentations privately, while making a video recording of the speech. The Center’s tutors, who are also students, then go over the presentation with the presenters. More often than not the students say that the review with the tutor was less stressful and more helpful than they expected. When students do not perform well the first time — on their video— the tutors can help them do better and point out that public speaking is very much a learnable skill with practice. With practice, students may come to realize that their public speaking is quite good and that may lead them to speak up in the classroom in lieu of creating a video to speak for them. At the same time, developing skills to create a good video is useful as an end in itself.

5. **Use personal response systems** to increase participation. Maha has found that this works for some classes where students aren’t very talkative (e.g. an engineering class she was once doing an in-class assessment with). Instead of having the same 3-4 students answer all questions on behalf of the class, using a personal response system such as NearPod, Socrative or even Google Forms can allow all students in the class an opportunity to participate. This may not fit with very small classes, but is occasionally useful for classes as small as 20. Personal response systems have the potential to draw students more deeply into the class session, which makes it more likely that they will have something to say later.

6. **Digital and Analog Participation.** Give students credit for participating differently online vs face to face. Some may prefer one mode over another. As long as there are enough opportunities for both throughout your course, and unless one mode is essential to your learning goals you can encourage students to participate in whatever mix makes sense to them. Steve shows how this can be mixed up in a fully online course: students interact daily over Twitter and he also hosts weekly Google
Hangouts for students who want to speak and listen more directly. Often the participants in those two groups are different and both types of participation get credit.

7. **Question Your Content and Pedagogy.** Ask yourself if your content is inclusive of different cultural perspectives or if it privileges one (and how this affects non-dominant students). Ask other faculty and even students to contribute alternative content. Consider whether your pedagogical approach privileges particular students all the time (e.g. eloquent speakers, those comfortable with debate, good writers) without supporting other students to develop in those areas. Find ways to support students who need more support (e.g. get help from campus) or offer alternatives yourself. In seminars, Steve often begins the course by asking students to identify 2-3 questions on the subject of the course which they would like to explore in the course. He then sorts and collates the responses to create the list of topics they will study throughout the semester, but he may also add a few topics of his own to ensure that everything necessary is covered. He hopes students will take more ownership of the course if it studies topics of interest to them. Maha often takes a content-independent approach to teaching, which she has written about previously (Bali, 2016b).

8. **Don’t Assume, Give Choices.** Don’t assume certain students will prefer one option over another – just make the choices available.

There are many ways to be more inclusive. What do you do to make your classes more inclusive of shy or minority students? Send your comments to bali@aucegypt.edu

**References**


Best Feet Forward: Instructional Designers as Pedagogical Consultants

Sean Michael Morris, Instructional Designer, Middlebury College

This article was originally published at Middlebury College’s blog MiddCreate
http://digitallearning.middcreate.net/reflections/best-feet-forward-instructional-designers-as-pedagogical-consultants/ and is republished with permission of the author.

I was perhaps more an instructional designer as the English Program chair at the Community Colleges of Colorado Online than I was in my first job under that title. Instructional design has a long history outside of formal education; it’s been used by businesses for decades as a scaffold upon which to build skills training for employees. (If you’ve taken Middlebury’s online course “Intersections: Preventing Harassment & Sexual Violence”, you’ve taken a course built by an instructional designer.) For the most part, instructional design in the corporate sector involves building content pages—with some interactivity—that a user can click through before being assessed on what usually equates to reading comprehension.

Instructional design in higher education, and at Middlebury, is different. An instructional designer is not simply a person upon whom a teacher can rely to upload content or answer questions about functionality in the LMS or another digital platform. An instructional designer is a consultant whose background and knowledge extend beyond the technological and into the pedagogical and theoretical.

That’s why I say I was more an instructional designer as a program chair than I was when “instructional designer” was my title. As the chair of an entirely online English program, the core of my work revolved around the pedagogical, not the technological. Or, perhaps more accurately, the pedagogical as it relates to and is inflected by the technological—the human when it meets the machine. For me, the primary concern of instructional design should not be content nor the interface, but should be the learner, and how the learner will encounter the interface, the computer, the digital.

Seymour Papert, one of the earliest thinkers on computing in education, writing about the capacity for computers and computing to ignite the imagination in students, said:

Children who grow up with the opportunity to explore the jungles and the cities and the deep oceans and ancient myths and outer space will be even less likely than the players of video games to sit quietly through anything even vaguely resembling the elementary-school curriculum as we have known it up to now! (9)

But he also, presciently, wrote about the computer in institutions of education:

The shift from a radically subversive instrument in the classroom to a blunted conservative instrument in the computer lab came neither from a lack of knowledge nor from a lack of software. I explain it by an innate intelligence of School, which acted like any living organism in defending itself against a foreign body … Progressive teachers knew very well how to use the computer for their own ends as an instrument of change; School knew very well how to nip this subversion in the bud. (39-40)
The emphasis on technology at most universities misses the point of bringing together learning and the digital. In many cases, the introduction of digital technology is a placation of those who are yearning for progress, or an inventory that can be listed upon the school web site to evidence that school’s progressive outlook on technology. For many institutions, this was the reason to begin to offer MOOCs (Massive Open Online Courses). Not because there was some real benefit to learners, teachers, or the college, but to keep up with the Joneses. When we reify new pedagogies through technologies that might (but don’t often) deliver them, we forget that the most valuable technology in education is people, and their willingness and capacity for invention, discovery, and reinvention.

It can be, somewhat unexpectedly, the work of the instructional designer to discern between digital methodologies and institutional infrastructures that focus on technological use and those which favor the originality and expertise of learners and teachers. This discernment comes by looking through a critical lens at not just a tool—Canvas, Adobe Connect, Google Apps for Education, etc.—but also at the assumptions behind the tool, the pedagogies it has baked in, the intentions of those considering its adoption (from teachers to administrators to academic technologists), and the repercussions or benefits to learning if the tool gets used. The critical instructional designer asks questions about tool choice and use, pedagogical approach, student and teacher preparation, and whether agency—the students’ and teacher’s—can be preserved and supported by the tool.

And a critical instructional designer, in consultation with an instructor or administrator, must be prepared to offer alternatives to the digital if all these factors cannot be reconciled. Pedagogy is an agile business, and it is also the demesne of compassionate labor. Without agility and compassion, the management of technological infrastructure doesn’t support learning. This is one reason why a project like Domain of One’s Own (MiddCreate) is important (see Watters, 2015)—not just because of the impact it has on student agency and digital identity, but because of the way it challenges us to become more flexible in the technology we support, developing processes that respond rather than restrict, that enable rather than limit.

The digital asks us to wreck ourselves upon possibility. Our own best intentions will lead us to create scaffolds for learners, rules for technology use, templates for getting things done on the web. But this is a replication of the worst parts of disciplinarity: it’s not professionalism, it’s the will to bind the mind to a certain course of thinking. Why would we take the web, lasso it, and put it in a corral? We can learn a lot more, and see more of the world, if we let it take us where it will.

The instructional designer, figured as a consultant, is someone who experiments, learns, tries, learns again… right beside the teacher. They bring an expertise not in “best practices”, but in “best questions”, “best approaches”, and “best feet forward”.

References
What Is Integrative Learning And Why Does It Matter?

An Integrative Learning Ecology

Carol Clark (ELI), Ghada Elshimi (RHET), Doris Jones (RHET), Tamer Shoeib (CHEM), Alessandro Topa (PHIL)

Typically, students in liberal arts universities receive their formal education in two discrete parts – their courses of major, which prepare them for their chosen career, and a core curriculum, which introduces them to the liberal arts, widens their world views and cultivates critical inquiry, communication skills and intellectual habits of the mind. While this separation is practical in terms of structural efficiency, concerns about this artificial divide have preoccupied educators for some time, as it implies to students and faculty that liberal education examines abstract or theoretical areas of study, while content related learning is relevant to real world industries and careers. There have been calls for more meaningful integration of learning, to reflect real-world complexities and seamless learning capacities that enable a holistic view of problems to prepare for an uncertain future. The Association of American Colleges and Universities (AAC&U) has championed the cause to raise institutional awareness about the challenges college graduates are facing in the complex 21st century global society. It has called for intentional integration of discipline-based and core curriculum learning, where faculty in the disciplines design learning experiences with an eye on core learning outcomes, while core instruction makes deliberate connections with careers and professions. This will create an integrative learning ecology where all programs, resources and activities support meaningful student learning.

Figure 1. Integrative Learning Concept Map. (Kemp, Jeremy, 2006)

In a 2002 report, Greater Expectations: A New Vision for Learning as a Nation Goes to College, the AAC&U created a heuristic framework of curricular and co-curricular programming in which...
institutions of higher learning can help students and faculty make connections between areas of study while applying knowledge to new settings that seek to make meaning out of these connections:

Intentional learners are integrative thinkers who can see connections in seemingly disparate information and draw on a wide range of knowledge to make decisions. They adapt the skills learned in one situation to problems encountered in another: in a classroom, the workplace, their communities, or their personal lives. As a result, intentional learners succeed even when instability is the only constant. For intentional learners, intellectual study connects to personal life, formal education [connects] to work, and knowledge to social responsibility. Through understanding the power and implications of education, learners who are intentional consciously choose to act in ethical and responsible ways. (AAC&U, 2002, pp. 21-22).

Integrative learning is, therefore, more than just making connections between different concepts or experiences; it also involves recognizing and evaluating those connections.

Integrative learning is based on several principles. As outlined by Ferren and Paris (2015), it:

- Targets holistic learning outcomes that bring about cognitive, personal and social growth;
- Prepares students for complex real-world problems that do not come in neat discipline-bound packages but span disciplines, skills and cultures;
- Promotes curricular and curricular connections, and uses campus and community as learning spaces;
- Engages students in reflective and evaluative activities with regard to their learning;
- Promotes creative problem-solving and extension of learning to new and unscripted situations through encouraging practice in unfamiliar contexts and exposure to new perspectives; and
- Values diversity of learners, and supports pedagogies that are adaptable to all populations and cultures.

As such, these principles are delivered to students through “high impact pedagogical practices”, such as assignments that encourage deep inquiry and research, writing intensive courses, interdisciplinary perspectives, reflective assignments such as e-portfolios, internships and study abroad experiences, campus events that connect to curricular themes, community-based learning, and student-centered assessment practices. By focusing on the connections and coherence afforded by an institutional integrative approach, these principles allow focus on curriculum design, programmatic assessment, and faculty development, by bringing the student experience to the fore.

Establishing integrative learning on our campus will require a rethinking of curricula, both in the majors and in the Core Curriculum. This will enhance natural connections between content knowledge and the cognitive and communication skills that enable students to maximize the benefits of a liberal arts education while preparing for life in the real world.
Major and core requirements can be recast for all stakeholders as complementary elements of an integrated education that supports holistic student growth. Resources to support new curricular visions, high impact practices beyond the freshman level core courses, collaborative learning, and partnerships across campus should be rethought. If such integrated learning can be established, the AUC campus will become a more vibrant ecosystem that supports shared purposes, principles, and connections designed to bring about unprecedented collaborations and synthesis of all aspects of learning.

* This article is based on the findings of a delegation of AUC faculty from across the disciplines who participated in the Association of American Colleges and Universities (AAC&U) Institute of Integrative Learning, at Loyola University Chicago in summer 2016.

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Challenging Faculty Assumptions about Content When Adopting Problem-Based Learning

Mark A. Serva, Ph.D, University of Delaware

Problem-based learning (PBL)—as well as other inquiry-based pedagogies—enhances student learning by engaging students in the learning process. Students engaging in PBL solve problems, think analytically, and work with ambiguous information. Research consistently demonstrates the effectiveness of PBL (as well as the ineffectiveness of more passive approaches, such as lecture).

Even with the considerable evidence supporting the efficacy of PBL to enhance learning, many faculty continue to lecture. One source of faculty resistance to PBL concerns coverage: "If I adopt PBL, will I still be able to cover the same amount of material?" Unfortunately, the answer to this question is not simple, and requires reviewing some assumptions that are endemic to higher education:

- Covering material is a sufficient condition for students learning the material.
- Including more content in a class will result in more student learning.

Contrary to these assumptions, the relationship between the amount of content delivered in a class and the depth of student learning is complex (see Figure). Adding content can indeed enhance learning, but only until the content reaches students' cognitive limits for processing information. Beyond this inflection point, additional content rapidly obstructs students' ability to engage with the material in a deeper way. Moreover, this inflection point can occur not only over the course of a semester, but also within a class. Students who passively listen to an instructor's lecture quickly reach their cognitive limit, because students often cannot process all of the information in a lecture. Hence, the illustrated inflection point is valid not only over the course of a semester, but also within each class.

Unfortunately, faculty often underestimate students' physical cognitive limits (both within a class and across a semester), tending to integrate more content than students can deeply
integrate and understand. Out of physiological necessity, well-meaning students will gravitate toward shallow learning strategies (e.g., skimming chapters, highlighting the text, developing mnemonics) in an attempt to memorize, cram, and facilitate short-term recall. Ironically, the signs of shallow learning are often obvious. Students, for example, may fail to recall or understand concepts after a short time. Students may also complain that exams are not reflective of class examples, when the exam simply has changed the question's context. Even though such symptoms indicate that faculty are using a teaching strategy that encourages shallow learning, the common faculty response is blaming the student.

Solving this problem requires a shift in faculty's mindset from a focus on content (what do my students know?) to a focus on process (What can my students do?). Process objectives include communication skills, teamwork, analytical reasoning, and problem solving, among others. Such a shift also necessitates a change in faculty's teaching strategy, because students cannot learn how to be good communicators (or teammates, or problem-solvers, or analytical thinkers) from a lecture. Moreover, achieving mastery requires allocating considerable class time to practice and to learn from mistakes. Students need to make mistakes to develop the cognitive capacity to become effective thinkers and decision-makers.

If developing process skills requires considerable class time, how can faculty achieve their content objectives? To mitigate content concerns, one approach that is gaining popularity is the use of flipped classroom models. A flipped model leverages the best of both the internal and external classroom. Faculty can take advantage of the external classroom by requiring students to read chapters or watch videos outside of class. An in-class quiz can then confirm that students are prepared. Faculty can also easily make their lectures available outside of class by recording their lectures. Unlike a live lecture, posting videos enables the student to overcome their cognitive limits by viewing videos as many times as necessary to understand the foundational concepts.

Shifting lectures to the external classroom has an added benefit: it can free up considerable time for students to practice in the internal classroom—that is, when faculty meet with students during the schedule class time. To achieve deeper learning, the internal classroom can then become a place for students to practice, to fail, to improve, and to develop their abilities. Feedback from faculty is critical: faculty can enhance learning by embracing student failure, by encouraging students to make mistakes, and by providing constructive feedback during class. Deeper learning can only occur through iteration, through formative (as opposed to summative) assessment, and through a supportive learning environment.

Faculty and students are not the only ones who would benefit from this shift in mindset: institutions of higher education have a stake in improving student learning. Students and parents are increasingly reconsidering the value of higher education as tuition costs rise. Competition from Internet-based educational offerings has increased, as online
offerings become more engaging. Production values on sites such as Udemy, Khan Academy, and Coursera have improved, as have the integration of gamification, context-specific feedback, and reward mechanisms. Free sites such as Khan Academy are providing a multi-faceted learning environment that is more effective than many college classes. Hence, the value of a content-laden lecture is quickly becoming less valuable and more expendable, since an Internet search can provide almost any fact in a matter of seconds. But leveraging these improved resources also provide an opportunity for faculty to release their control on content delivery.

Viewing the adoption of PBL and other active learning pedagogies as reducing the opportunities for content coverage is shortsighted, because a continued focus on content delivery is an educational dead-end. Instead of viewing the integration of student engagement as reducing content, faculty should instead view it as an opportunity to free up time that will allow students to practice, iterate, improve, and eventually achieve deeper learning. Pedagogies such as problem-based learning, project-based learning, and team-based learning all offer promise to improve and deepen student learning, but these promises can only be realized if faculty release control and free up class time to allow students to actively engage in the material.
In April 2017 CLT, in collaboration with the Center for Transforming Undergraduate Education at the University of Delaware, ran AUC's first Problem-based Learning (PBL) Institute. This institute was attended by over 20 faculty members from across the schools, breaking down the disciplinary divides and bringing innovative faculty together to explore how PBL can best be implemented in AUC classrooms. Starting fall 2017, CLT will continue to offer PBL workshops, consultations and support to all faculty at AUC, with the aim of disseminating inquiry-based pedagogies and increasing student engagement. Learn more about the 2-day institute by viewing these graphic notes capturing the event and highlighting the key aspects. A big thank-you to Dr. Mahmoud Shaltout, CLT's "resident cartoonist" and AUC faculty member.
A PBL Instructor
1. Establishes learning goals
2. Creates great problems
3. Keeps teams on track
4. Presents info as needed
5. Evaluates outcomes
6. Encourages effective learning & transfer

DIFFERENCE BETWEEN PBL & CASE STUDIES?

PBL
- Student centered
- Small group
- Problems before concepts

CASE
- Teacher centered
- Whole class
- Cases as extension, application of concepts

KNOWLEDGE
Scheme for categorizing problems

1. DESCRIPTIVE
   
   Fact finding
   
   Following changes related to land use in 13th century
   
   Many national borders changed
   
   What would a legal map look like?

2. EXPLANATORY
   
   Explanation
   
   People in the 15th century used to believe it was possible to fall off the Earth
   
   Explain why?

3. PROCEDURAL
   
   Strategy
   
   A 45-year-old woman cannot lift her arm more than 45 degrees, and she complains of pins & needles in her arm.
   
   If you were the physican, what would you do?

4. PERSONAL
   
   Moral dilemma
   
   A mother breaks into a store to obtain expensive life-saving drugs for her child. The next day she tells the physician what she has done.
   
   What would physician do?
Reflection... the most of the time the goals actually are not enough space for the rest!!

1. Content Knowledge?
2. Design/Creativity?
3. Real world context?
4. Student intrinsic motivation?
5. Hands on skill?
6. Critical thinking?
7. Disciplinary integration?
8. Teamwork/collaboration?
9. Self directed learning?

WHAT'S IMPORTANT?

CONSIDERATIONS?

WHAT MAKES A GOOD PBL PROBLEM?

PROCESS ORIENTED?
- Global specific
- Effective communication and writing
- Acquiring/evaluating information
- Higher order/critical thinking

CONTENT ORIENTED?
- Subject specific
- Facts/knowledge
- Understanding

TOP DOWN
Backward design
1. Outcomes/skills
2. Evidence for students to exhibit skills (summative assessment)
3. Develop PBL problems that help reach skills

SO, IN CONCLUSION... A GOOD PBL PROBLEM:

Bottom up
Experiential design
1. Problem you feel will engage students
2. Reframe problem to fit learning objectives
   - Consider evidence you need for students to exhibit desired skills
3. Develop assessment plan.

PAGE 3

McLeod '17
Q: WHAT DO I WANT MY STUDENTS TO LEARN?  
What is ESSENTIAL, REALLY ESSENTIAL?  
which topics require insight?  
Accreditation obligations?  
Overall course objectives  
objectives for each unit  
know how to do  
Value  
Overall course objectives  
How will I determine if objective is met?  
grading drives everything!  
Assessment?  
• formative, ongoing  
• process oriented  
• diagnostic, assess for improvement  
Evaluation  
• summative, final  
• product oriented  
• judgemental, arrive at overall grade  
Know Info  
Use Info  
Learn tasks  
Learning Activities  
Assessment drives everything  
issues?  
• recognize student roles  
• evaluation or formative and summative  
• integrating knowledge & skills  
• using the power of groups but also retain personal accountability  
Rubric  
• clarity expectations  
• effective feedback  
• convenient evaluation  
• minimizes subjectivity  
• focal point for ongoing treatment  
• encourages self-assessment  
Bloom's Taxonomy  
• remember  
• understand  
• apply  
• analyze  
• evaluate  
SET OF CRITERIA  
AGAINST WHICH A PRODUCT IS TO BE JUDGED  
For both Formative & Summative  
Drawn by Mahmoud Shaltout  
MacTack '17
Game On! Enhancing Engagement with Student-Generated Games

Fady Morcos (adapted from CLT Day poster with the same title)

Abstract

Games can be an effective tool for integration of concepts and attitudes within a complex landscape. Integration of game mechanics and game-thinking techniques to non-game platforms has recently gained grounds in multiple domains, including teaching and education. Gamification of education can greatly enhance user experience (XP) and influence user behavior. Adding a “game layer” to learning or training material can generate products that are engaging and influential to both the player and the developer of the gamified experience.

Why Gamify?

People like playing games; they like being challenged in a fun way. Recently, there has been a huge move towards building on the success of video games, social media games, as well as board games, to influence people’s learning and behavior. Using gamification in the classroom, whether as a teaching technique or as a design project, can be of great merit to students.

- Games provide a safe space where students can overcome shyness, and explore new sides of themselves.
- Games offer a dynamic learning space, which advances in difficulty to match players developing skills.
- Games build on active experimentation and discovery, with low stakes on failure. (Jessica Hammer)
- Games offer players multiple routes for success, allowing them to choose their own challenges within the larger task. (Edwin Locke)

At AUC, we are acquainting students with the practice of gamification and educational game design, as part of a course on Creative Thinking and Problem-Solving. Students learn how to design physical educational games (board and card games), through a player-centered design approach. Game design is approached from a problem-solving perspective, with goals, hurdles and divergent ideation, much like playing the game itself.

Game: A Definition

Although commonly synonymous with play, a game can be seen as a problem-solving activity, approached with a playful attitude. It is “a system in which players engage in an abstract challenge, defined by rules, interactivity, and feedback, that results in a quantifiable outcome, often eliciting an emotional reaction.” - Karl Kapp

Designing Effective Games

Designing a successful game, requires elaborate attention to all elements of Kapp’s definition. As a game designer, your task is not only to get people to play, but to keep them playing. An effective game is one that has a clear and relevant purpose; one that engages players in a challenging, yet attainable, problem-solving activity.

Design Space

When designing a game, the developer needs to blueprint two sides of the design spaces, Real Space and Game Space. Real Space has to do with game theme and educational content, goal and target experience (XP), as well as layer type and psychographics; while Game Space deals with game concept, game mechanics, and game dynamics.
Real Space

Decide on a theme for your game.

- The theme can be one of the major topics of your course; for example, economic sustainability, inequality, energy footprint, recycling, history, urban planning, etc.
- Explicitly define your real-world goals and target experience.
- What knowledge, attitude-shift, or behavioral change do you want your players to gain after playing the game?
- Study your target player type and psychographics.
- Understanding what motivates your player is key to achieving successful game flow, and assuring a high level of engagement and interaction.

Design Space – Real Space
The concept map above summarizes some of the key considerations for designing Real Space. Note that the Sustainability theme, presented in the map, is just an example theme. At the end of the Real Space blueprint, you have to select the educational content for the game. Content has to be tailored to include the specific pieces of knowledge, skills or behavior traits that you are hoping your players will learn or gain from the game. Content has to be tailored to your player’s demographics and psychographics to assure interest, and enhance engagement. Remember: get them to play, and keep them playing!

Game Space

The second dimension of the design process is Game Space. Here, you will be designing an abstraction to reality. You begin by defining the game concept.

- What type of game will I design?
- What is the game mood? (Remember player psychographics; what motivates my players?)
- What is the abstract challenge?
- What is the story of my game space?
- How can I capture the Target XP?

Game Mechanics

The next step is to decide on your game mechanics. What elements are you going to use in your game? Think of game mechanics as the tools that govern your plot, or game story. These could include dice, spinning wheel, cards, boards, avatars, badges, game collectables, banknotes, etc. Your game mechanics also include game rules and winning states. You also need to design the interaction between all the game elements. For example, when to throw a dice, when to pick a card, where the action points are, what action is rewarded, what action is punished, how to unlock features, etc.

Game Dynamics

The final step before integration and testing is designing Game Dynamics. In simple terms, it is the interaction of the players with the game mechanics. Game mechanics alone are not enough to design a successful game. Many games, and gamified experiences failed miserably because they focused on game mechanics and neglected players’ interaction. Game dynamics are all about engagement and game flow. You need to answer the question, what will make my players addicted to the game?

Final Stretch

Build a prototype to help you test all elements of your game. Test the effect of different actions or rewards on engagement and game flow. Caution! Do not lose sight of your Real Space goals and target XP. Gamification is truly an educational, fun adventure that deserves a try!

References

I’ve recently returned home from my fantastic visit to the American University in Cairo, and I got off the plane to find an email waiting from a recent AUC graduate. This graduate noted that he’d been particularly caught by the idea of merging a passion in games with a career, and he wanted to ask if I had any advice for how to get started. This is one of my favorite questions to answer: it’s been an unexpected journey from growing up playing video games (often to all hours of the night, and without much regard for my actual homework) and reading novels to talking about the creativity games can embody for exploring ideas here at AUC.

During the EURECA conference, I was fortunate to be part of a panel on the question of research and creativity. One question that concerned us all was the problem of “teaching” creativity, which to me is rather akin to trying to “teach” passion. During that panel, I suggested that there are several stages to creativity: first, we have to understand the systems and ideas around us. Next, we have to use those systems and build our own knowledge within them. Finally, we can break out of the system and do something new.

The first stage of this path to creativity and research is building knowledge, and passion can make the tedious parts of gaining that understanding worth the investment. As a professor, I get to share the things I love all the time, from augmented and alternate reality experiences to esoteric novels, “Choose Your Own Adventure” books, and old-school games like Monkey Island and Day of the Tentacle. I hope that some of these will spark new passion for my students, but I also find that my most creative students are the ones who already come in with a strong love of something that they can merge with the system or learning at hand. I actually started pulling games into my research as an undergraduate, and it started almost by accident, as I was writing papers about popular culture and avant-garde literature and I kept getting drawn towards the parallels between these topics and gaming. This brought me to the second stage of creativity: I was using the tools of different disciplines to enter into the space of traditional scholarship. Mastering and using systems is important no matter what major a student starts out in, and integrating digital tools, programming, and social media are all required components of a new fundamental literacy that can enable creativity through their expressive potential.

Finally, when we strive to be creative with our research or our work more broadly, we must build on these passions and new knowledge to break the systems we’ve grown accustomed to. I saw fantastic examples of this step on the creative ladder in action at the Creatopia showcase, with students from outside of game and web design taking their disciplines and interests and expressing them through these new mediums. For me, using creativity in research has meant taking the lens that games offer and turning it on education itself. Games offer ways of exploring ideas through action in spaces that are adaptive, responsive, and
friendly to failure: why shouldn’t education offer similar opportunities to build passion and find connections between the things a student already loves and the disciplines of the classroom? The cliché advice—“do what you love”—rings hollow in an international economy that is full of challenges. My advice instead, as I responded to the student’s email, is to look for the connections between what you love and whatever you are doing, and see if you can find new opportunities to create better experiences for work and learning. Thanks again to everyone who attended my talks and workshops at AUC. I look forward to hearing from you and seeing more of what you are creating next!
My career in education, although brief, has been quite diverse and allowed me to experience the educational process from multiple perspectives. I worked as a high school teacher and a lecturer in England, and during each of these phases, I grew more and more fond of creative pedagogies and their impact on education. Most recently I have been working as a Pedagogy and Assessment officer at AUC's Center for Learning and Teaching, and have started doing a lot more research in relation to course design.

I recently became enamored with the concept of gamification after attending a conference workshop on the topic. I was hooked and began my journey of discovery of books, blogs and workshops on gamification. As with any new concept in any field, there is only a limited amount of research on the subject and slightly the different definitions of each for the concept of gamification is slightly different. The definition I prefer is the one provided by Karl Kapp (2012): “Gamification is using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning, and solve problems.” Definitions of game mechanics, aesthetics and thinking are all defined in a earlier edition of New Chalk Talk titled Game On! (Morcos, 2014)

I decided to take my first venture into gamifying my syllabus, partly due to my curiosity as a faculty developer, to see how this plays out in practice. But I was also intrigued with the notion of tapping into students’ intrinsic motivation. I decided to follow the advice I regularly give to faculty during consultations and start small and by only gamifying a part of my syllabus to see how that would go. I was initially apprehensive, as I was teaching full time in-service teachers and was concerned that gamification might be too childish for them. I quickly overcame any concerns the minute I began researching the topic, due to the fact that most gamification that has taken place has been for enterprises and businesses to engage their clients and personnel.

This article is my reflection on the experience as a whole with the lessons learnt and future directions.

I teach a course titled ‘Productivity and Professional Practice’ as part of the Professional Educator’s Diploma, a Teacher development program at the Graduate School of Education. The course focuses on the importance of professional development for in-service teachers and how they can take charge of their own development by utilizing technology.

The rules of the learning game: 

You are required to complete all the activities marked with a **

You can do as many activities as you wish.

You are in charge of your own mastery of learning: 

Level 1: 150 points (C)
Level 2: 1400 points (B)
Level 3: 1600 points (A)
Level 4: 1600+ points (A + Bonus*)

Any extra marks you get will count for extra credit towards your project.
I tried to incorporate several game dynamics and mechanics to my syllabus (see figure 1). I included many ‘game choices’ for the students. In the learning game section of the syllabus, they had freedom to choose which and how many assignments to do. I also built in a ‘points, levels and badges system’ and included a ‘surprise element’ (any extra points awarded after completing the learning game would count towards a bonus percentage of the final project). I ensured the presence of difficulty cycles, not just because that is a good game design technique but it also allows for a new type of differentiation in the classroom. Several of the assignments were loosely linked, with a rationale to try and get the students to choose their own learning path by trying to establish the connections between the assignments.

For example, the student may realize that an e-portfolio is likely to include a biography and be built on a website, therefore if the student were to complete the biography assignment and the web development tutorial, that should make completing the big task (worth more points), in this case the e-portfolio, a lot easier (See figure 2). The idea here was to introduce some game flow to the experience, if the students feel they are learning different things at different times but still reaching the same outcome, it makes for much more interesting classroom discussions.

I also tried to incorporate some ‘action triggers’, although this area could be improved in the future. The idea was to provide some clues as to when certain assignments would be ‘unlocked’, once unlocked; a new action could be triggered.

Overall, I thoroughly enjoyed the experience and judging by the course evaluations, so did the students. Some of the interesting findings were that the students seemed far more motivated and curious; they were always asking questions and for hints about 'locked' assignments. They covered far more workload than previous iterations of the course. I usually have one final project, and some of the students completed 3-4 final projects using this approach, based on their own choices. The syllabus, which normally disappears once received by the students on the first day of class never again to be seen, re-surfaced almost every class. The students frequently brought it over to ask about assignments, or check if they had chosen an appropriate ‘learning path’.

Nonetheless, where there are ups, there are downs. Because I was trying a new teaching strategy, I made a point to be excessively flexible with the students to give them a chance to adapt to this new format. This flexibility was my downfall. Although almost all the students were motivated to work and complete the assignments, they took some time to get used to this approach. This resulted in panic submissions towards the end of the semester (due to my flexibility with deadlines) and obviously a mammoth task of marking twelve different types of assignments simultaneously. On reflection, you cannot ask 'Angry birds’ or a person you’re
playing at 'tic-tac-toe’ to “skip the level this time” or “just let me complete it at a different time”. Game rules are game rules and make no exceptions (unless they are planned exceptions, like rewards). This is something that I have to consider for future cycles. I will either be gamifying a larger portion of the course, or place more weight on the current gamified portion. This is because the students contributed and completed far more work than previous classes and than what I had expected. If the same levels of motivations as this semester are present, I would hate to dilute that with a weak marking ideology. I would therefore need to allocate more weight to that part of the course as some of the students did far more work than usual and felt that 30% was not sufficient for the amount of effort exerted.

Overall, this was one of the most enjoyable experiences during my teaching career. I will definitely be looking to gamify more parts of my courses and am interested in trying to use more gamification elements, especially aesthetics, as this is the only cornerstone of gamification I have yet to try and incorporate in my classes. I would highly recommend this approach to AUC faculty and would like to extend an invitation to faculty members who would like to discuss or attempt this in their courses to contact the Center for Learning and Teaching to support you with this.

References:

Trends, Challenges and Technologies for Higher Education
Where Does AUC and our New Strategic Plan Stand?
Aziza Ellozy, Director Center for Learning and Teaching

What you see above is an “infographic” (used with permission) summarizing the findings of this year’s influential NMC Horizon Report, Higher Education Edition (Johnson, Adams Becker, Estrada & Freeman, 2015). This edition is produced annually (since 2002) by the New Media Consortium (NMC) in collaboration with the EDUCAUSE Learning Initiative (ELI).

A panel of 56 experts from 17 countries collaboratively produced this year’s 2015 report. The experts’ research identified the six emerging technologies, the six key trends and the six challenges that would most likely influence higher education within the next five years.

I would not be saying anything new when I say that Higher Education has been facing complex and disruptive changes in the last 25+ years. Based on research on how people learn, the teaching and learning landscape has been adjusting and adapting to new paradigms involving pedagogical and technological shifts. Emphasis has shifted from a teacher-centered model to a student-centered one, where active learning strategies, experiential learning and

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7 The New Media Consortium describes itself as a not-for-profit group of more than 250 higher education institutions, museums and companies that conducts research into emerging technologies. The NMC Horizon report produces 4 global editions (H. Ed, K-12, museum and library) that highlight 6 technologies that are likely to impact teaching, learning and creative inquiry within the next 5 years.
assessment are emphasized and where emerging technologies continue to offer innovative ways to facilitate and enable learning. Quoting AUC’s new strategic plan,

Successful institutions are not necessarily the developers of such technologies or practices but they are both alert and nimble in assessing innovation in higher education and in selectively incorporating appropriate practices into their own operation. (Strategic Plan for AUC at its Centennial, p. 7)

In the spirit of our new strategic plan, let us examine where we stand with regards to the report above. I will only focus on what is seen as “short term” trends and technologies given the space limitations of this short newsletter. The report defines “short term” trends as those that have already impacted the learning environment and would typically become mainstream in the next one to two years.

- **TRENDS:** I think it is safe to say that with regards to the short-term trends we are making baby steps towards Blended Learning, (Strategic Plan for AUC at its Centennial, Objective III, D.2) although I maintain that we are far behind our peer US universities and many regional ones, including AUB.

According to the most recent ECAR8 study (to which 75,306 undergraduate students responded from 213 campuses, in 45 US states and 15 countries including AUC):

More students than ever have experienced a digital learning environment. The majority say they learn best with a blend of online and face-to-face work (Dahlstrom & Bischsel, 2014)

The quantitative results, summarized in the opposite graph, should give us pause for reflection. How many of our students benefit from partially online learning, and if they do what is the quality of this online learning?

- **EDUCATIONAL TECHNOLOGY:** In this category, the report cites the “flipped” classroom. Strictly speaking, the “flipped” classroom is not a technology as it is a teaching and learning modality where the higher cognitive skills are applied to active learning group work during valuable class time, while “content” and “information” are delivered outside of class using various technology-enabled tools: recorded video lectures, e-books with collaborative annotations, online discussion software, podcasts, formative assessments tools, plus the plethora of social software etc. This model has been mostly adopted by US institutions where 29% of faculty are using it and 27% say they will use it within a year. (NMC Horizon report 2015 Higher Education Edition, p. 38)

Some AUC faculty are familiar with the term through CLT workshops and News@AUC articles, but very few have experimented with it. A lot of work needs to be done to encourage and support faculty in designing, piloting and assessing this innovative practice particularly in the STEM disciplines where it has been quite successful.

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8 ECAR: Educause Center for Applied Research
**CHALLENGES:** We face many of the challenges that are cited in the report, in particular “Teaching Complex Thinking” (a much needed skill to understand and to solve today’s ever increasing complex, real world problems), “Improving Digital Literacy” (for both students and faculty), and my all-time favorite, “Rewards for Teaching”.

Regarding the latter, university administrators worldwide have increasingly been favoring funding, promoting and rewarding research over improving teaching in the classroom. This has resulted in an over reliance on poorly compensated adjunct faculty (a recent AAUP report shows that adjunct professors constitute 76% of faculty in US institutions of higher education) (Segran, 2014; Curtis, 2014)

The EU, Canada, Australia and some institutions in the US are addressing this problem by taking the lead in prioritizing quality teaching. In a 2013 Report to the European Commission (McAleese et al, p. 15), recommendations include recognizing that “the preference of research over teaching in defining academic merit needs rebalancing” and that “Every institution should develop and implement a strategy for the support and on-going improvement of the quality of teaching and learning, devoting the necessary level of human and financial resources to the task, and integrating this priority in its overall mission, giving teaching due parity with research.” (p. 64)

I was gratified to see that AUC in its new strategic plan is taking the lead in this direction with the promise that “we will need to incentivize, train and reward faculty to teach in novel ways” and to “ensure that they are recognized for agility and innovation in teaching as well as in their own research, scholarship and creative expression.” (Strategic Plan for AUC at its Centennial, Objective I, B.3 and Objective II, B.5)

Our challenge remains to ensure that these objectives are realized and that the proposals above do not end up collecting dust on a shelf, as is often the case. For its part, CLT will update its own strategic plan and will see to it that it will be implemented in a timely fashion. However, only with the support of the university administration and in particular the Provost, Deans and Chairs, can such initiatives be successful.

**References:**


Provost’s Teaching Enhancement Initiative
Aziza Ellozy, Director, Center for Learning and Teaching

“We will need to incentivize, train and reward faculty to teach in Novel ways”

AUC Strategic Plan, 2014-19

As part of his Academic Strategic Priorities (August 2015, ‘Enhancing Teaching Effectiveness’), the Provost directed the Center for Learning and Teaching (CLT) to develop a Teaching Enhancement Program that would address the needs of all AUC faculty and that would lead to a certificate of participation, which would count towards promotion, tenure, renewal of contract, and the AFR.

In an email to all faculty on September 6 2015, the Provost explained the rationale for such a program.

“The philosophy of liberal arts education is among the main institutional priorities of AUC, as it enhances our students’ self-awareness and enables our graduates to have a unique edge in their professional life.”

“Engaging in such professional development of teaching provides opportunities for all faculty—both new and experienced--to exchange experiences, re-emphasize the values of a liberal arts education in their teaching, and grow as innovators and leaders in the field of higher education. Because of the importance of life-long learning in maintaining and enhancing faculty skills, engagement in these kinds of professional development opportunities will be increasingly considered in the AFR and reviews for tenure, promotion and contract renewal.”

The Teaching Enhancement Certificate Program developed by CLT is summarized below.

Target Audience
This program is intended to serve all AUC faculty – fulltime and adjunct. New faculty and those who are on tenure-track are strongly encouraged to enroll in the first cohort of fall 2015.

Teaching Enhancement Certificate Program
The Center for Learning and Teaching (CLT) will be offering workshops aimed at addressing a wide spectrum of faculty needs in teaching and learning. This professional development opportunity is multi-faceted and includes the completion of a Teaching Enhancement Certificate.

Faculty will have the option to choose between Teaching Enhancement Certificate 1 and Teaching Enhancement Certificate 2 depending on whether they have taken CLT workshops previously or not.

In order to complete a certificate, faculty will have the choice to complete ONE of the following: (they could of course choose to complete several certificate)
Teaching Enhancement Certificate 1

Attend the following 4 workshops repeated twice per semester as day-long CLT Institutes (they do not need to be taken sequentially or all in one day)

Institute 1: Sunday October 4th, 2015
Institute 2: Monday November 23rd, 2015

- The Enhanced Lecture
- Basics of Course Design
- Technology to Support Good Practice in Undergraduate Education
- The Art of Structuring Learning Outcomes

Certificates should preferably be completed over the course of 1 academic year

*A list of workshops offered this year is being distributed by mail and will also be found on the CLT website.

Teaching Enhancement Certificate 2

Faculty who have already participated in CLT workshops that fulfill Certificate 1 may consider obtaining a certificate in one (or more) of the following 5 CLT tracks. Completing a set of 4 workshops in any one track fulfills the certificate requirement.

CLT Tracks*

- Assessment for Learning Track
- Active Learning Track
- Web-Enhanced Learning Track
- Course Design Track
- Community-Based Learning Track

Additional optional professional development activities that may be included in AFR, tenure and promotion portfolios and renewal of contract, include:

**Demonstration of Teaching Innovation**
Preparing and presenting a teaching and learning innovation activity (at teaching and learning community events or other formal meeting among peers at AUC).

**Peer Feedback and/or Mid-Semester Assessment of Teaching**
This involves an observation by a faculty mentor or in the case of a mid-semester assessment, a CLT consultant. Both observations are regarded as tools for formative growth-oriented assessment and will result in a feedback report that is confidential.

**CLT Support Activities**
CLT members will be available to support faculty as they plan and implement their teaching innovation activities. This may be a re-designed lesson or assignment, or integration of a new technology or pedagogy into the classroom. CLT consultation is also available for larger projects such as new course design or re-design.

**CLT Faculty Associates**
Faculty members will be selected from Schools to serve as CLT liaisons within departments and to help disseminate information about our programs/services. Certificates of appreciation will be presented to all CLT Faculty Associates engaging in this initiative.
Reflective Pedagogies and the Metacognitive Approach to Reading Comprehension

Doris Jones, Senior Instructor, Department of Rhetoric and Composition
Caroline Mitry, Center for Learning and Teaching
Joyce Rafia, Center for Learning and Teaching

The Department of Rhetoric and Composition has a strong pedagogical culture of fostering reading and critical thinking in its curriculum. Yet teaching AUC students to reflect on how they read remains challenging. Such reflection is a metacognitive skill and requires the most effective teaching resources available because literacy is foundational for all learning. An extensive review of the literature has shown that most research concerning critical reading skills development focuses primarily on K-12 learners. There exists, however, some landmark research about metacognitive reading skills in higher education. Flavell’s (1979) model of metacognition serves as the foundation for research in the field of metacognition today. According to Flavell, metacognition is fundamental in reading, oral skills, language acquisition, writing, attention, social interactions and memory. He also divides metacognitive processes into four categories: (1) metacognitive knowledge, (2) metacognitive experiences, (3) goals/tasks, and (4) actions/strategies (p. 906). Flavell further claims metacognition involves the “active monitoring and consequent regulation and orchestration of these processes in relation to the cognitive objects or data on which they bear, usually in service of some concrete goal or objective” (p. 232).

In this essay, we highlight the results from a year-long Action Research project that involved the implementation of metacognitive reading strategies in several CORE 1010 Filming Difference classes. Implementing and evaluating metacognitive reading strategies included: (1) choosing longer and strategic readings to complement the course theme; (2) placing students in reading communities (small reading groups) to identify text structure before reading, (3) assigning specific critical reading questions for groups to engage the text; and (4) conducting focus group sessions before and after the text was read. Taking these steps were critical in order to understand AUC student behaviors and practices related to course readings and classroom discussions. Furthermore, students were divided to work in groups to help answer two strategic questions:

1. Do metacognitive/small group reading skills lead to greater comprehension of a text than private reading?
2. If so, what aspects of metacognitive/group reading contribute to higher levels of comprehension?

Finding answers to these questions involves reflective teaching and research to address problems students encounter when they attempt to develop higher level reading skills while also creating guided opportunities for interpersonal and small group discussions. Based on initial findings, there is strong evidence to support the integration of a metacognitive reading
model, which includes helping students perform a critical inventory of their own knowledge before actively engaging with texts. **Action Research Findings**

Following the assignment of the readings, and group presentations, we assessed the use of guided reading activities with students in Fall 2014 and Spring 2015 (a total of 25 students). CLT performed several focus group sessions with students before and after they engaged in the activities. A brief overview of the findings is presented in this article while a more detailed presentation will be included in CLT’s symposium this semester.

In pre-activity focus groups students were asked general questions about their reading preferences and habits, whether they like to read or not, their attitude towards readings assigned in an academic setting, etc. The graph here shows students’ response to the general question of whether they like to read or not (in any language), 64% of students (18) indicated that they do not like to read. The majority (90%) of students who do not like to read listed boredom of reading and lack of time to read as their primary reasons for their aversion to reading.

When asked about readings that are assigned within an academic setting, the majority of students agreed that if a reading is interesting enough for them, they would not mind it being “long”, as in such a case the reading becomes less boring. Interestingly, the relevance of a reading to their field of study or to their lives did not affect students’ interest significantly. All students agreed that the most important thing in a reading would be how interesting they found it.

Many students also mentioned that they had issues with maintaining focus while reading assigned material. When asked about how they dealt with that problem, they indicated several strategies such as: highlighting text, taking notes while reading, dividing text into sections to read at different times, summarizing paragraphs while identifying and focusing on the important parts, skipping uninteresting parts, timing themselves, and using Google Translate to find the meanings of difficult words.

Post-activity focus groups were also conducted to find out what students had learnt from working together, the factors that helped them learn and their suggestions for improving similar activities in the future. These focus groups yielded some useful suggestions that were incorporated by the instructor in the following semesters’ guided reading tasks.

Post-activity focus groups showed that there were specific elements of the design of the reading activity that helped students read “better”. First, the focus group reflected the
importance of using questions in the guided reading activity. Students reported that questions helped them maintain interest by creating a more purposeful reading. They also added that they helped them organize knowledge. These responses are in line with recent cognitive research that provided evidence to the effectiveness of having well-structured questions to guide reading (Andersen, 2000). Another factor that also enhanced their reading experience was reading in groups. To elaborate, students were able to understand each other’s perspectives of the readings which, in turn, enhanced their metacognitive abilities. Students reflected on their experience saying that the group diversity provided a richer experience to analyzing the text. Also, when different people answered the same question, each brought their own understanding of the text thus providing a more holistic picture. The design of the assignments in Spring and Summer 2015 helped students maintain focus as they felt the workload was manageable and specific; as one student put it “we knew what we needed to focus on.” In addition, the students felt more encouraged to understand from one another within the group, rather than reading on their own.

Based on an analysis of the focus group results, it was discovered that consciousness of reading strategies with students increased, and that more metacognitive strategies were performed during the think-aloud tasks. In addition, the results of this yearlong Action Research have wider institutional and pedagogical implications for the Common Reading Program and for faculty across the disciplines. Since reading is a foundational skill for all learning, it is important that teachers employ a variety of methods by selecting texts and using reading strategies to achieve specific learning goals. Equally important, teachers are encouraged to model metacognitive strategies to support students as they learn how to use these skills to become knowledge producers instead of passive consumers of information.

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References


Exploring the Digital Humanities at AUC #DHAUC

David Wrisley, Associate Professor, Department of English, American University of Beirut
Maha Bali, Associate Professor of Practice, Center for Learning and Teaching, American University in Cairo

The digital brings different playgrounds and new kinds of interaction, and we must incessantly ask questions of it, disturbing the edge upon which we find ourselves so precariously perched. And what the digital asks of us is that every assumption we have be turned on its head. Jesse Stommel

The Digital Humanities (DH) are a diverse set of academic practices that have spread internationally in the last decade, and have only now begun to gain traction in the Arab world. On Wednesday September 30, 2015, The Center for Learning and Teaching held the first Digital Humanities event in Egypt, entitled “Exploring the Digital Humanities”, at the American University in Cairo New Campus. The idea of the event came to us when we first met at the American University of Beirut in March 2015 at THATCamp Beirut organized by David, following a weeklong digital humanities training event there. The Cairo event included a keynote workshop on mapping and visualization by David, a keynote session that involved exploration of sentiment analysis on Twitter by author and professor of computational linguistics at Ain Shams University, Khaled el Ghamry, and a panel of scholars from different institutions exploring the opportunities and challenges the Digital Humanities pose for the Arab World. Panelists included Iman Soliman from AUC’s Center for Arabic Study Abroad and Arabic Language department, Mark Muehlhauesler from the AUC library, Marianne Nabil from Cairo University and Dalia Assem, a social researcher and writer for Asharq Al-Awsat newspaper, and former part-timer at Bibliotecha Alexandrina.

The Digital Humanities are, in a nutshell, innovative ways of practicing the humanities in a world of digital technologies that blur the line between the quantitative and qualitative. Some examples include electronic text encoding, digital archiving, text mining, digital mapping, and network analysis. These innovative practices are not only the domain of research, but are also beginning to make their way into classroom pedagogy (consult the website “Around DH in 80 Days” for an overview of digital humanities projects in various parts of the world). It is not uncommon for digital humanities to take on different contours in different environments, since they often bring together different members of a university community--faculty, students, librarians, IT, staff, etc. to work on common projects (refer to the website, for a variety of different definitions by DH practitioners).

The AUC event was well attended throughout the day (around 40 faculty, librarians, deans, faculty developers and IT staff) and was live tweeted at the hashtag #dhauc. A storify of the tweets is available. In the first workshop, participants explored a number of projects in the spatial humanities and tried their hand at some basic map visualization and customization. David’s workshop (outline available on his website) blended a lecture-style presentation, live demonstration and hands-on exercises. David was impressed by the active engagement throughout the morning session and how the AUC community was imagining how they
might incorporate data-driven aspects in their research and teaching. Faculty feedback included “I appreciated the opportunity to learn about this field that I know little about, and I enjoyed the hands on session - it made the whole idea less intimidating.” – Ghada El Shimi, Associate Dean for Undergraduate Education, & senior instructor, Rhetoric & Composition and “I could immediately envision lots of possibilities for using it in my research and/or teaching.” – Michael Reimer, Associate Professor, History. Khaled ElGhamry’s presentation focused on his study that involves quantitative and qualitative analysis of the Sunni-Shia hate speech on Twitter. He shared a heat map showing the geographical distribution of the hate speech on Arabic-language Twitter, a temporal curve tracking the growth and intensity of hate speech from 2006 to mid-2015, along with a qualitative analysis of the forms hate speech takes; such as dehumanizing and othering language. One faculty member said that this talk “raised some important issues and gave an example of the benefits of using digital tools for our kind of research but also the ethical challenges.” – Amina El Bendary, Associate Professor, History.

All the participants in the panel agreed that research material is not lacking in our part of the world, and yet to make such inquiry possible, new ways of designing and carrying out digital projects need to be acquired. Important questions and conversations that came up included the interlinked quantitative/qualitative dimensions of emergent research, the affordances and limitations of the digital, the potential for the Arab world to speak for itself rather than be spoken about from outside, ethical concerns of open research about the turmoil of our region today, as well as the larger risks we face in terms of surveillance and loss of privacy as our lives become more and more digital. At the event there was a palpable interest in how social media in Egypt and the region opens up both special opportunities and problems for digital research.

Some faculty raised concerns over the feasibility of applying what was learned at the event given their current skillset and time constraints. Academic institutions worldwide have faced this challenge, and the learning curve can be steep for some, and yet for others it involves digital skills they already possess. Pursuing digital humanities research takes time and collaboration, but there are many entry points now and the results can be transformative. Most large digital humanities projects that we know of involve a collaborative effort across units of a university—bringing together content expertise of faculty members, library staff and IT with meaningful opportunities for graduate and undergraduate student participation in research projects. There are also organizations willing to fund such projects, particularly when they involve cross-institutional collaboration. Another perpetual problem at such events is, of course, attendance. Nate Bowditch, Dean of the School of Humanities and Social Sciences at AUC said, “we need to engage our colleagues more fully when it comes to opportunities like this. Everyone in attendance was enthralled. The only problem is that more people should have been there”.

The feedback from attendees was overwhelmingly positive, and many called for opportunities to continue the conversation, and we already have plans to do so. Beirut has created an annual event for digital humanities training whose next meeting will be in January 2016 (dhibeirut.org), and The American University in Cairo will be hosting a Digital Pedagogy Lab
In March 2016 (in collaboration with Hybrid Pedagogy, sponsored by AMICAL and the Ford Foundation). It is our hope that our two American-style universities, that are leaders in so many domains, will explore further avenues of cooperation—in training, curricular design and research projects—and therefore open up opportunities for the Arab world to speak for itself more and more strongly in the digital realm.

References
Learning to Analyze and Critically Evaluate Ideas, Arguments, and Points of View

Patricia Armstrong, Vanderbilt University; Sonja Moyer, US Army Command and General Staff College; and Katherine Stanton, Princeton University.

This newsletter is extracted from a piece previously published on Tomorrow’s Professor

By encouraging our students to adopt a critical framework, we prepare them not only to engage in scholarly conversation and debate in our disciplines, but also to be engaged citizens in a democratic society. As Patricia King points out, “a student who appreciates why people approach controversial issues in her discipline from different perspectives is more likely to see and appreciate the reasons people approach social controversies from different perspectives. By the same token, a student who evaluates knowledge claims in his major by reference to the strength of the evidence in support of conflicting hypotheses would also be more inclined to evaluate contradictory claims about current moral issues by reference to the weight of available evidence” (King 2000, p. 23).

Helpful Hints

- In humanities and social science courses, keep the reading load manageable and model for students how to read critically and to evaluate arguments in your field (see IDEA Paper #40 Getting Students to Read: Fourteen Tips).
- In math, sciences, and engineering courses, encourage students participating in study groups not only to share ideas for solving problems but also to provide reasons for the problem solving ideas they advance.
- Have students respond to an editorial in a newspaper or to a review essay in a scholarly journal. For that response, ask students to identify unstated assumptions, biases, and points of views and show how they undermine the argument the author is making.
- Teach students to use a pro and con grid to analyze ideas and points of view (Angelo & Cross 1993, see pages 168-171).
- Take time in science and engineering classes to explore the ethical considerations of research questions and experimental design.
- In organized class debates, ask students to argue for a point of view counter to their own.
- Give students “ill-structured problems” in class to work through. Such problems have no known answer or solution and cannot be solved with formal rules of logic or mathematical formulas. Ask students to come up with multiple solutions for each problem and rank the viability of each solution.
- Teach students the “believing and doubting game” (Elbow, cited in Bean 1996, p.142), which asks them to be both sympathetic and skeptical readers.
- Help students develop strategies for systematically gathering data according to...

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9 The piece on Tomorrow’s Professor, is originally from Professional and Organizational Development Network-IDEA (POD-IDEA). Center Notes on Learning series, edited by Michael Theall, Youngstown State University. ©1999-2015 The IDEA Center. All rights reserved. Reprinted with permission.
methodologies in your discipline, assessing the quality and relevance of the data, evaluating sources, and interpreting the data (Bean 1996, p. 24).

- Encourage students to enter into dialogue with the sources they read; encourage them to ask questions, give assent, or protest in the margins of what they read.
- Train students to identify the author’s audience and purpose when they read.
- Encourage students to engage their critical reasoning skills outside of the classroom (Bean 1996, p. 24).

Assessment Issues
Angelo and Cross (1993) offer many techniques for assessing critical thinking, problem solving, analysis, and related skills. Echoing and expanding on their ideas, we make the following suggestions:

- Design a writing assignment that asks students to test a critic’s ideas (or an everyday assumption) against a primary text or texts.
- Ask students to apply a theory they’ve learned in a social science class by designing an experiment to test the theory. Have them carry out the experiment and document the results.
- Design a writing assignment that prompts students to position themselves within a scholarly or real-life debate.
- Ask students to review a scientific paper, assessing the evidence the authors use and how they use it.
- Allow students to choose a current political issue relevant to a community to which they are attached. Have them research both major parties’ point of view on this issue and critically analyze them. As a writing assignment or project, ask students to agree with one major party’s stand on this issue and justify their choice.
- Have students use a double-entry journal for reflection and self-assessment of this learning objective, using guided questioning. The journal helps faculty to assess the affective domain, and helps students through possible “road blocks” in the process of learning to analyze and critically evaluate ideas, arguments, and points of view. It also reinforces that this process is ongoing, not just an assignment for a class. Sample guided questions include: What happened (when you analyzed and critically evaluated ideas, arguments, and points of view)? What was your reaction as you went through this process? What did you learn about yourself? How can you apply what you learned to your education or your life?
- Construct a rubric (i.e. scoring guide) to provide guidelines for critical analysis and evaluation so students know what to expect when they are assessed. The criteria and standards for this rubric may include the “Elements of Reasoning and Intellectual Standards” in Paul and Elder’s Critical Thinking (2002).

References
Learning Together

Jon Nixon, Honorary Professor, Centre for Lifelong Learning Research and Development, Hong Kong Institute of Education

In early November I spent a wonderful three days in the Centre for Learning and Teaching. The highlights of my visit were my conversations with colleagues, a cross-disciplinary seminar on postgraduate supervision and a full-day symposium on innovation in teaching and learning. Throughout, I was on a steep learning curve and gained so much from colleagues within AUC. I am very grateful for the hospitality and for the opportunity to share ideas. I was also given a tour of your splendid rare books library, its exhibitions and its archive. The latter is a hugely important resource beautifully curated by its staff. Thank you all very much. The following is a brief summary of the talk I gave at the symposium.

Almost all the problems we now face are collective problems: bigger-than-self-problems that require both collective and global understanding: global warming; decent trade regulations; the protection of the environment and animal species; the future of nuclear energy and the dangers of nuclear weapons; the movement of labour and the establishment of decent labour standards; the protection of children from trafficking, sexual abuse, and forced labour. Such problems can only truly be addressed through multilateral discussions.

Globalisation, in other words, presents us not only with economic, political and social challenges, but with a huge hermeneutical challenge: a challenge, that is, to our understanding. How, in a world of seemingly incommensurable difference, are we to engage in conversations that are both constitutive of, and conditional upon, shared understanding?

That was the kind of question that the German philosopher Hans-Georg Gadamer was seeking to address. Gadamer’s life spanned the long 20th century. Born in 1900 he lived till 2004, thereby surviving WWI, the rise of Nazism, WWII and the Cold War. His 1960 magnum opus – Truth and Method – reshaped the way in which we conceive of understanding and established hermeneutics as a major philosophical field.

Three big but beautifully simple ideas shaped his thinking: the idea of 'the fusion of horizons' - how understanding always entails an element of mutuality and reciprocity; the notion of what he calls 'the power of prejudice' - how we import ourselves into any attempt at understanding; and the idea that understanding is always 'beyond method' - that it involves what he called 'the hermeneutical imagination'.

Threading through these ideas is his insistence on what he calls 'the primacy of the question': an emphasis that takes us beyond 'the Socratic method' as a pedagogical tool and towards a theory of learning that places 'the learner as questioner' at the heart of the educational project.

Understanding, he argues, lies in the formulation and articulation of the question. What would higher education look like if it were framed on Gadamerian principles?

- it would place the student as questioner at the heart of the educative process;
- it would privilege dialogue and interchange;
- it would insist on the provisionality of understanding and the importance of acknowledging what falls outside the parameters of our existing understanding;
• it would highlight the indeterminacy of the outcomes of understanding.

So, let’s unpack those four themes and open them up for discussion:

*The primacy of the question* …

If to understand something is, as Gadamer suggests, to articulate the questions it asks of us, then we require pedagogies that recognise students as questioning agents: pedagogies that enable students to grasp for themselves the unique ‘questionableness of something’ (Gadamer’s phrase). We then need to ask whether even our more progressive pedagogies measure up to the task: Who asks the questions? Whose questions matter? Are ‘open’ questions valued as highly as ‘closed’ questions? How, through our own questioning, can we encourage students to become their own questioners? When – if at all – do we acknowledge our students’ ability to ask questions rather than answer them?

*The centrality of dialogue* …

If, as Gadamer again suggests, understanding is a conversational process – not just metaphorically but in practice – then we require pedagogies that encourage and acknowledge reciprocity and mutuality, listening and recognition, and the willingness to maintain openness rather than closure. We need pedagogies that enable students to think together in dialogue. That then poses further questions: To what extent do we encourage students to think together and to share their insights and understandings? How do we recognise and acknowledge this dialogical element within our assessment regimes? When – if at all – do we model ways of thinking together in our own teaching?

*The principle of provisionality* …

If, following Gadamer’s lead, we see understanding as framed by ever-shifting and ever-stretching horizons, then we require pedagogies that acknowledge both the provisionality and boundlessness of human understanding: pedagogies for understanding-not-yet-finished. Questions that go to the heart of what we mean by ‘lifelong learning’ then follow: How do we enable students to acknowledge the provisionality – and uncertainty – of human understanding while also discovering purposeful trajectories and imaginaries? What dispositions and qualities are required of them and of us? When – if at all – do we address the ontological insecurities that are inherent in the very notion of ‘understanding-not-yet-finished’?

*The indeterminacy of outcome* …

Finally, if understanding cannot be reduced to method but always involves an element of what Gadamer calls ‘hermeneutical imagination’, then we require pedagogies that acknowledge intuition and inference, celebrate the surprising and the unexpected, and encourage speculation and risk-taking. We need pedagogies that operate outside the managerial frame of pre-specified outcomes and identifiable targets. Among the questions that then arise are: Would we recognise a significant but unexpected learning outcome if it occurred? Do such outcomes figure in our assessment routines and audit procedures? When – if at all – do we value and acknowledge the surprising and unexpected when it occurs within our tutorials, seminar rooms and lecture halls? Such questions point towards a pedagogy that is both innovative and grounded in a notion of understanding as shared endeavour: a way of meeting across disciplines and across cultural and religious divides.
CLT Workshops: in the Eyes of Dr. Mahmoud Shaltout

Two workshops, hosted by CLT these past two weeks, were creatively captured by one of our faculty: the very talented Dr. Mahmoud Shaltout (Biology Dept.)

The workshops were “The Art of Discussion Leading” facilitated by Dr. Aziza Ellozy” and “Peer Instruction” facilitated by Dr. Adham Ramadan. Enjoy!
**Benefits?**
1. **MUCH MORE INTERACTION**
2. GREATER AWARENESS & UNDERSTANDING
3. Students know challenges
4. Fresh, thus express it better
5. Supporting communication skills

**Steps?**
1. **Concept Question** (a question)
2. Allow them to think individually & arrive to answer themselves
3. Record to themselves
4. Answer individually again & record answer

**Effective?**
1. **Actual Effectiveness**
   - More correct answers
   - More student-student interactions
   - Higher level of confidence
2. **Perceived Effectiveness**

**Challenges?**
1. Class Time
2. Preparation Time
3. Lack of student confidence
4. Can’t be used for non-science
5. Analysis of results

**Examples?**
- In class group work
- Peer evaluation
- Concept tests
- Case studies

**Peer Instruction**
- Learning from peers

**Benefits & Challenges**
- Sometimes, peer instruction & concept tests lead to anomalies wherein a wrong conclusion may be reached... this shouldn’t be viewed negatively but rather analyzed for potential reasons.
- Mistakes & errors are beneficial.
Twitter in the Classroom

Kim Fox

Associate Professor of Practice, Journalism and Mass Communication

By now everyone should be familiar with Twitter – mostly for its role in the 2011 uprising in Egypt. The microblogging platform began in 2006 and proved to be an easy way to communicate with like-minded people.

Twitter is now used for global breaking news, industry chats, writing haiku and other innovative ventures.

Almost as quickly as Twitter appeared on the scene, early adopting educators began experimenting with the platform as a pedagogical technique to augment traditional approaches to teaching. Some examples follow:

a) In 2009, Dr. Monica Rankin, a professor of History at the University of Texas at Dallas experimented with Twitter as a way to extend course discussions. According to a YouTube video summarizing the trial, her students were receptive to the idea (Smith, 2009).

b) Currently, a German foreign language instructor is incorporating Twitter into her teaching by building on Andrew Fitzgerald’s (2013) TED talk “Adventures in Twitter Fiction”. The idea, “a creative, collaborative Twitter project playing with the genre of the short story,” will focus on character development and storylines in German – published in the public sphere. The goal is to enhance students’ language and writing skills. Although this assignment could be implemented on Blackboard or Moodle, the Twitter platform provides invaluable immediate feedback from the public at large in addition to comments from the instructor and classmates.

c) The Twitter Scavenger Hunt (TSH) is an assignment, which I’ve successfully executed every semester since 2011 in my 200 level Multimedia Writing course at AUC. Students in the course work in pairs to tweet the responses to ten questions. The questions are provided at the start of class and the students have the class period to complete the assignment. This assignment fulfills several of the course learning objectives, gets the students out of the classroom and applies new technology to their field of study. More specifically, for this assignment, students worked in the field (i.e. the campus), conducted interviews, learned to write concisely, edited their writing, took photos, worked under a deadline and utilized new technology. For writing based disciplines, those accomplishments could be the gateway to enhance traditional teaching methods.

All of the students who completed this semester’s TSH informally responded that they “enjoyed the TSH” though students who rarely utilize the platform on their own commented that they would benefit from a more detailed tutorial on how to generally use Twitter more effectively.
Research

Academic research on the effectiveness of Twitter as a classroom tool is mostly in its infancy, but some research exists. The results vary. Research by Dhir, Buragga, & Boreqqa (2013) explored the advantages and disadvantages of Twitter for educational purposes and “discovered that Twitter has positive impact on informal learning, class dynamics, motivation, as well as the academic and psychological development of young students” (p. 672).

It was also stated by Abe and Jordan (2013) that “in many cases the benefits of using social media appear to outweigh the limitations” (p.16).

The research has overwhelmingly indicated that Twitter can be effective as a discussion format. Student engagement seems to increase, for example, and students who are less likely to participate in discussions in large classes become active participants in the Twitter class discussions. That was the case with Rankin’s history class of 90 students (Smith, 2009).

Obviously with Twitter, you don’t have the face-to-face contact where kinesiology plays a significant role in how people express themselves. Abe and Jordan (2013) point out an additional anxiety that may prevent educators from adopting Twitter in the classroom in that “faculty concerns may arise from the manner in which social media imposes ‘blurring of the lines between the personal and professional roles of the lecturer and students’” (p. 19). Despite that risk, the researchers go on to say, “it is important to recognize the benefits of connecting with students as well as to consider alternative ways in which students may be motivated to participate in the classroom” (p.19).

Other Ideas

If you’re considering implementing a Twitter based activity, here are some easy ideas that have been employed in classrooms: 1) Tweet pre-class discussion/reading material questions; 2) Tweet news and current events for quiz material; and 3) Twitter Haiku (or “micropoetry” – see Cripps, 2013).

Conclusion

There’s a good chance that you’re asking yourself if it’s a good idea for you to use Twitter in the classroom? Well, here are some points to consider: What do you wish to achieve by incorporating Twitter? How will you assess the Twitter activity? Will incorporating Twitter be more laborious and does the potential outcome outweigh that additional workload?

Twitter in the classroom can be an effective tool to reach out to students on a platform that is already a part of many of their daily lives. A 2012 study by the Pew Internet and American Life Project notes that “20% of 18-24 year olds use Twitter on a daily basis,” that’s a 400% increase from 2010. It’s likely that the percentage has increased since then.

Those numbers show that you could potentially leverage the opportunity to successfully initiate Twitter in your course. A good way to start could be with an easy-to-assess extra credit assignment.
Citations


Additional Resources


Where’s the box? Out of the Box Thinking in the Core Curriculum

AUC Pilots Creative Thinking and Problem Solving Course

Hoda Mostafa, SSE/CLT
Caroline Mitry, CLT
Dana Sabbah, CLT

In Spring 2013, the Core Curriculum, office of the Dean of Undergraduate Studies and the School of Sciences and Engineering joined forces to offer a new course targeting a series of questions that have continually eluded educators and students. What is creativity? Can it be defined? Are we all creative? How can students identify their creativity? Can it be awakened or nurtured just by taking a course?

Frank Bradley (PVA), Hoda Mostafa (SSE/CLT), Magda Mostafa (AENG) and Melanie Carter (RHET) collaboratively designed, developed and taught the four-module course SEMR 199 “Creative Thinking and Problem Solving” using a multidisciplinary approach to teaching creativity in context.

In the first module, students explored their preconceptions about creativity and their own innate creativity, reflecting on TED-talk videos by renowned speakers who examine creativity as a skill and a way of life. Students learned about deliberate creativity and explored models used to enhance creative problem solving skills. Application of these skills was included in course work of the second module, where students worked in groups to generate solution statements and implementation plans for problems on campus leading up to the design and construction of creative solutions to problems observed on Bartlett plaza using recycled materials. Creative Expression was the focus of the third module, where students were guided through a series of creative writing exercises based on the popular book *What a Plant Knows* to ultimately author their own stories. The final module on Acting and the Creative State of Being exposed students to an actor’s perspective at the Gerhart Theatre and AUC’s Center for the Arts. Using this multifaceted approach helped set students along the path of discovering their own creativity and applying creative thinking skills to their majors as they continue to move through AUC’s “City of Learning”.

When designing courses for freshman students, engagement and participation is paramount and may elude instructors in many settings. Creative Thinking and Problem Solving required students to complete an E-portfolio documenting their progress, achievements and reflections on the course and their experiences. They also created their own blogs where this personal reflection space encouraged them to share within the class environment their thoughts, assignments and comments on selected videos, readings and posts shared by the instructors and other students.

Hoda Mostafa and the teaching team worked closely with the Center for Learning and Teaching (CLT) on developing tools for assessing the course and getting students’ feedback on its various aspects. Information was gathered from students through surveys, an in-class facilitated discussion and reflection papers where students reflected on their personal experience in the course. After the first 4 weeks of classes, students took a survey followed
by an in-class discussion to find out how they felt about what they’d been learning, their thoughts, what they liked/disliked about the course and the material they’d been working with, etc. Later towards the end of the semester, students were asked to take another survey and present their own reflections on the overall experience of the course.

The information gathered from students through the end of semester online survey and individual reflections conveyed how much students appreciated this “unique” experience. Interestingly enough, when students were asked to talk about their experience in the course after four weeks of classes, 12 out of the 26 said the class was a bit boring because they felt that they didn’t learn anything new. Others thought that it was not as “fun” as they expected, and half of them were not sure what the purpose of the first module was. However, by the end of the semester students expressed how much they had valued the opportunity of taking this course, describing it as a “life time experience” that gave them the chance to discover a lot of things about their abilities, themselves and about life in general. A student explained saying “the course had provided me with a new perspective about life…I now see things differently”.

Below is a graph of students’ responses to a question on the survey they took towards the end of the semester about their level of agreement/disagreement with statements hereunder.

As illustrated, the majority of students indicated their agreement on being able to apply practical tools to support creativity in multiple disciplines and they also felt confident in using creative thinking tools to extract concepts & generate more ideas. All students found that the skills/experience acquired through the course would be useful in real-life situations and many
of them agreed that they were becoming more aware of their own individual creativity, in addition to feeling more confident in their creative thinking abilities.

An important part of new course development is that of course assessment; however perhaps the most valuable and rewarding experience was seeing the change in students’ perceptions about themselves. Blogs and portfolios, because of their cumulative and progressive nature allow instructors to “see inside” students’ heads in a sense, and tailor teaching accordingly. Although many instructors tend to shy away from teaching new freshman students, the energy, commitment and courage of these students was in fact a life changing experience for the instructors as well.

For questions and comments email bodamostafa@aucegypt.edu
Conflict as a Source of Learning

Aziza Ellozy, Founding Director, Center for Learning and Teaching

At the start of this semester, a particular issue was on the mind of many faculty members because of the inevitable (and potentially disruptive) consequence of the country’s political scene: how would we deal with possible conflicts and disagreements that may arise in the classroom over differing political viewpoints following the June 30th 2013 uprising? President Anderson alerted us in her email of August 21st, 2013, that “it is important that we remember that there are as many viewpoints about contemporary issues in Egypt as there are individuals in our community” and that “we have a rich tradition of sharing ideas, expressing opinions and debating positions.”

As many have argued before me, I contend that conflict and disagreement in the classroom are important catalysts in preparing our students to become “critical citizens” and constructive participants in the democratic process, an important learning outcome which we have endorsed in several of our recent newsletters (Bali, 2013; Glavanis, 2013).

Last year, Tomorrow’s Professor, a Stanford University publication, reprinted a chapter entitled “Conflict as a Constructive Curricular Strategy” from David Donahue’s (2011) book Democratic Dilemmas of Teaching Service-Learning: Curricular Strategies for Success. In it he argues that conflict can

…be framed as an opportunity to engage with others, examine new ideas and perspectives, and challenge one’s own assumptions, even if that is not always the approach taken by politicians, organizers, bloggers, and opinion writers where winning and shouting louder than others can take precedence over consideration and open-mindedness.

Donahue argues that conflict in the classroom is inevitable and even contends that the lack of it (intentional or not) may reflect a lack of interaction and, more importantly, of learning. He actually sees “disagreement and disequilibrium and contention and conflict in the classroom” as valuable because they give us a chance to expose our students to the dynamics of the democratic process and to model how best to deal with it.

So, in a nutshell, not only should we not shy away from conflict, we should intentionally introduce it within any academic field, and not restrict it to those that deal with political issues. For example, disagreements may result over the findings of particular experimental studies in scientific or medical research. Opposing interpretations of a historical or current event (conspiracy theories being my favorite) can lead to strong differences of opinion as would conflicting analyses of social issues or literary pieces.

Using controversial issues as a strategy is nothing new. Most faculty (especially those who teach first and second year students) know that to get their students to engage in face to face (or online) discussions or debates, they should choose examples that are provocative or at least that deal with conflicting points of view.

11 This chapter can also be partially found in the online version of the book preview at http://books.google.com/books?isbn=1579226000
In previous New Chalk Talk articles (2007) I have argued that most students entering AUC come from a culture where working hard, memorizing information and relying on “authority” to guide them through their education is expected to be rewarded with success. They know the rules of the game and what to expect if they stick to them. They then come to a place where (if we do it properly) they are suddenly confronted with rules that have shifted considerably and where the emphasis on thinking “critically” and “independently” may catch them unprepared.

We should therefore not be surprised when these students feel uncomfortable when confronted with ideas or perspectives that challenge their cherished beliefs and/or their sense of identity. When prodded to search for different perspectives, the realization that several “authorities” are in conflict adds to the uneasiness.

In addition to developing critical thinking skills and the acquisition of knowledge relevant to their studies and careers, how can we develop attitudes and values such as tolerance and respect of diversity, peaceful conflict management, promotion and respect of Human Rights, gender equality, social justice and inclusiveness?

This is a long and challenging list, but if we accept Donahue’s premise that “conflict is not only inevitable” but “can be a prime opportunity for learning”, how can we use it as an opportunity for growth and transformation for our students, and what strategies could we use that would help? How can we model how to respond to conflict?

Kloss (1994), who has found Perry’s scheme of intellectual development very helpful, has devised pedagogical strategies (which include using conflict and disagreement) to help university students become critical thinkers. For students who think in dualistic ways his recommendations include the following:

- Provide examples that deal with conflicting points of view
- Create an environment that encourages different viewpoints and that accepts them as legitimate
- Reinforce the unlikelihood of one potential solution, approach, or viewpoint to complex problems
- Support the legitimacy of students’ point of view while
- Ask for reasonable and substantive justification for assumptions and value judgments
- Challenge overgeneralizations and appeal to authority
- All the while provides for a safe environment where students feel they can take risks.

References:


Engaging Students in Creative and Collaborative Multimedia Content Production
An Alternative Form of Assessment

Pandeli Glavanis
Director, Community Based Learning
Associate Director, Center for Learning and Teaching

Student-centered teaching and learning has gained tremendous popularity among faculty and students during the last two decades and many courses seek innovative ways in which students can enhance their own learning experience and gain new skills at the same time. The emergence of new and innovative learning technologies has also contributed to this process and there is now a plethora of academic courses that make use of several such technologies in the teaching process. Furthermore, higher education is also acutely cognizant of the importance of the various new skills required by students in order for them to secure rewarding employment after graduation. Along with the conventional skills of literacy, disciplinary knowledge, and communication, skills such as digital literacies, digital design and familiarity with Web 2.0 tools have become additional requirements. Nevertheless, faculty teaching in the disciplines do not have the time or in many cases the expertise to teach these new skills as part of their courses. Joan Lippincott (2007), however, argues forcefully that for such skills to be acquired by students they need to be integrated into the syllabus and enable students to acquire them while preparing multimedia content as part of their assignments.

This short essay acknowledges the importance of Lippincott’s thesis and makes use of a Classroom Action Research (CAR) project in an undergraduate course at the American University in Cairo, in order to evaluate its application. The course, entitled “Social Problems of the Middle East” required students to produce multimedia content as part of their assignments and they were assessed on both the content and multimedia dimension for the final grades.

In order to achieve this objective, the course was structured around a close collaboration between the faculty member teaching the course (Glavanis) a multimedia expert at CLT and the students. Appropriate Web 2.0 tools were identified and the assignments were designed to provide students with as much opportunity as possible to be creative in producing content that expresses their learning in the course. Furthermore, the multimedia expert provided Glavanis and the students with the IT support and the appropriate in-class training. He also ensured that students were comfortable using the Web 2.0 tools and found them “user-friendly”. This collaborative experience has been monitored closely through a Classroom Action Research (CAR) project and which is reported below.

The objective of the CAR was to explore the use of a participatory and collaborative approach in which students were (co)producers of learning materials (via a wiki). A quick review of
the existing literature showed that there were pros and cons in such a teaching strategy. In particular, previous studies found:

**Pros:** Many educators argue that Web 2.0 tools provide richer and more engaging pathways to learn with great potential for facilitating student multimedia content creation, interactive information sharing, student-centered design and collaboration (Cochrane, 2010; McLoughlin and Lee, 2008). Studies suggest that students gain a better understanding of subject knowledge and develop transferable skills while using Web 2.0 tools (Lee et al., 2006).

**Cons:** However, there are authors who believe that not all students may be familiar with technology (Crook et al., 2008; Kennedy et al., 2007) and with some questioning the ideology of Web 2.0 which they claim has not been seriously evaluated and has affected Pedagogy 2.0, resulting in its failure (Williamson, 2009). (Teaching and Learning with Plymouth University, 2012, p.3)

Thus, the CAR had a base line from which to start the research and benchmark against. Given the limited space available this short essay will only produce the results (of the SGID? Survey?) in a summative form below.

1. Students displayed mixed perceptions of producing multimedia content. The majority enjoyed the experience of being challenged to work alone and create, while a minority felt it was a frustrating experience; this was particularly with a couple of mature students who noted, “As a mature student I felt extremely disadvantaged.”

2. Of those that benefited from the experience they highlighted the following:
   a. Increased understanding of subject knowledge
   b. Gained a sense of accomplishment
   c. Enjoyed and benefitted from collaboration with peers – group work
   d. Increased critical thinking skills and improved communication skills
   e. Produced Iterative learning – “Can remember the course content better than if I had just written an essay.”
   f. Had fun and enjoyed learning

In general, we concluded that the experience was successful and worth repeating, while taking into account student comments. Thus, student collaborative multimedia content production as an alternative to traditional teaching and conventional forms of assessment was justified and is now being used in all my teaching.

How Students used Multimedia technology to Study Abroad while staying at Home

“Sometimes, when the place is dangerous or remote, a digital handshake is a viable path to global learning for college students.” (Cathy Youngmann, 2013)

Furthermore, in a different course where we collaborated via a wiki and Skype with Cabrini College, Pennsylvania, USA, to produce an award winning multimedia object (http://youthvoicesrise.com) additional benefits to those already noted above were noted. As Cathy Youngmann, my colleague at Cabrini argued, “It seems that providing students with the opportunity for global education experiences is currently a major initiative in higher
education. The benefits of preparing college students to become global citizens through international contacts are obvious.” (Youngmann, 2013). Thus, communication technology and multimedia content production produces also real benefits when students are unable to travel abroad. Youngmann also notes that “the true learning excitement took place during Skype interviews with students in Cairo” and “my American students were quite moved by the personal life stories that their Egyptian peers shared during individual video Skype sessions.” Youngmann concludes that “This was an amazing experience for Cabrini students, who grew in their understanding of the Middle East, of Islam, of journalism, of technology and about the importance of stepping out of their comfort zones.” This also applied to Cairo-based students who were delighted with the experience and in particular that the final output was a website entitled, Arab Awakening: A View from the Inside, was awarded several prizes including the prestigious 2012 Pinnacle Award for Best Multimedia Feature Presentation from the College Media Association, and became available as free e-book from iTunes.

In conclusion, it is possible to suggest from the above that collaborative student multimedia content production is a teaching strategy with potential for engagement and learning which also generates a variety of benefits for student learning. CLT provides both pedagogic and technical support for any faculty wishing to take on this challenge.

References
Le Goût De La Lecture
(The Love of Reading)
Doris Jones
Department of Rhetoric and Composition

We read to know we are not alone. — C.S. Lewis

Across cultures, reading behavior has been described in many languages: in French, goût de la lecture; in English, the love of reading, the habit of reading, or the desire to read; and in German, Leselust. How can AUC discover and promote a culture of reading within our community? How can students, faculty, librarians, administrators and staff assist with promoting a reading culture to enhance the “first year experience” for all incoming freshmen? One possibility is to implement a common reading program in which a discourse about reading is celebrated. Often described as a catalyst to establish intellectual community during a student’s academic career (Laufgraben 2006), common reading programs have been adopted by hundreds of colleges and universities in the United States. As an instructor in Rhetoric and Composition, it is increasingly apparent from classroom experience and from survey results produced by the Office of Data Analytics and Institutional Research (2013) that reading habits among AUC students is disconcertingly low. How can we increase the reading levels of our students while also addressing their attitudes about reading and other literary cultural activities?

The inaugural launch of AUC’s One Book, One Conversation, One Community initiative is scheduled to begin with the fall 2014 freshman class. Such a program can put in motion an intentional partnership with learning communities across AUC that can help students achieve a heightened sense of the individual’s role in society as well as acquire an awareness of diverse cultural perspectives to foster an academic year of sustained conversations, collaboration and community spirit.

More than a Book Club
A central goal for a successful One Book, One Conversation, One Community reading program is to harness an understanding of our student’s interests, shared experiences and the culture of learning, which is unique to AUC. When combined together, these factors can allow the university to move forward with a purposeful agenda to enhance its Freshman Year Program by encouraging all stakeholders to actively participate in the creation and sustainability of this important initiative. (See Table 1 below)
There exists a plethora of titles considered common reads, however a major challenge AUC will face is choosing books that are of interest to our culture of learning here in Egypt. Books may often lose the "common" when closely examined for context, content, culture and environment. It is for these reasons focus groups were organized last fall and surveys were distributed to the AUC community to ascertain potential titles of interest. In addition, Selection and Implementation Committees have been organized to ensure an informed process is conducted by which a single text can be recommended for adoption.

Following a critical review of countless common reading programs in the United States, far too many of the titles have engendered a “commercial” element, which has resulted in placing too much emphasis on inviting the "author" to campus. In this regard, the original purpose of the “common reading” objective, which is to enhance the first year experience and beyond for entering freshman, runs the risk of being lost. This critical review has also provided key insights into how the world of "common reads" may help us steer clear of these pitfalls that often cause such programs to fail. If we remain vigilant to interpret potential texts by connecting them to our students, our community, and our individual histories, we can choose texts that are culturally relevant to commence a community dialogue. (See Table 2 below).
Selection Criteria for Common Reading Text

- Engage freshmen, and draw them into reading and reflection.
- Encourage freshmen to grow intellectually.
- Encourage thought and discussion in a variety of courses and contexts.
- Value diverse cultural perspectives.
- Address contemporary social issues? Be academically oriented.
- Promote reading, critical thinking, information literacy, and discussion skills.
- Bring students, faculty, and staff together around a range of activities and events such as essay contests, debates, colloquia, plays and other activities involving common intellectual exchanges that will focus on themes central to the selected book.
- Be accessible in multiple formats (print, e-books) and other formats to accommodate students with disabilities.
- Be affordable (purchase cost of the book; speakers' fees associated with the author or experts on the text).

References


Time to Open the Discussion on Open Access

Maha Bali, Associate Professor of Practice, Center for Learning and Teaching

What are your views on the topic of open access publishing? Are you for it, against it, suspicious of it, ambivalent? We're hoping that whatever your views, you'll be interested in some of the events in store in the upcoming Open Access event, April 27-28.

The most important moral argument I have for open access publishing, especially in the digital era, is this: the content of academic journals is based on the hard work of the authors and peer reviewers, none of whom get paid for publishing their articles in academic journals. And yet, publishers charge readers for access to those articles, the marginal cost of which is almost zero for the digitally published versions of the journals. The research those academic authors have done is often funded by governmental organizations, i.e. taxpayer money, and yet taxpayers (who have already paid indirectly) are asked to pay again to read the results of that research.

I believe that many of the arguments against open access publishing are based on myths/misconceptions about quality, payment structures and the ways it can be achieved, as I discuss in Bali (2013). I also got together with Mark Muehlhaeusler from AUC library (another advocate of open access, and wrote an article (2014) about why (Arab) academics should care about open access publishing, and what they can do about it.

Mark also suggested it was time AUC led an event on open access, and to open that event to the public. Since then, we have been working with Meggan Houlihan from the library and with Access to Knowledge for Development (A2K4D) via Dr. Nagla Rizk and Nadine Weheba, through whom we have been able to involve prominent open access advocates nationally and internationally.

The event will include workshops and a joint panel by two guest visitors Nicholas Cop (representing the Latin American open access initiative SciELO) and Iryna Kuchma (representing the international organization EIFL). Another panel on Open Access in Egypt includes panelists from BibAlex, OpenEgypt, Tahrir Academy, Open Knowledge Foundation, and Cairo University. There will be also a panel on copyright and disseminating research, including panelist from within and outside of AUC.

References

A Word from the CLT Director

Welcome to a new academic year and I hope you are having a productive start. This is our first “New Chalk Talk” issue this semester and we are reprinting with permission an article by R. Felder and R. Brent who are world-renowned for their workshops on effective teaching. Richard Felder has been a world leader in chemical engineering education and engineering education research for decades.

Aziza Ellozy

Want Your Students to Think Creatively And Critically? How About Teaching Them?

Rebecca Brent and Richard M. Felder

Ever hear a conversation like this in your department?

Professor X: “All these students can do is plug numbers into formulas—give them a problem a little different from the one in the text and they’re helpless.”

Professor Y: “Yeah, and they’re also functionally illiterate—most of them couldn’t write a coherent grocery list. On a quiz last month I asked for a clear and grammatically correct definition of vapor pressure, and a bunch of the students stomped me for it on the midterm evals. ‘I went into engineering to get away from this crap,’ one of them said.”

Professor Z: “It’s this whole spoiled generation—they want the grades but don’t want to do anything for them!”

If you haven’t heard anything like that, you haven’t been listening.

Two popular targets on the list of Things These Students Can’t Do are creative thinking (coming up with innovative ideas) and critical thinking (making judgments or choices and backing them up with evidence and logic). When our colleagues complain to us that their students can’t do them, after we make appropriate sympathetic noises we ask, “Where were they supposed to learn to do it?” The answers may vary, but one we rarely hear is “In my class.”

Leaving aside anomalous prodigies like Mozart and Gauss, people develop skills of any kind—musical performance or composition, math or physics, critical or creative thinking—through a lot of practice and feedback. That’s how you acquired your skills. You were either given or voluntarily took on tasks, and with someone else’s help or on your own you learned how to do them.

The more you did them, the better you got. Unfortunately, creative and critical thinking are not routinely taught in our schools, nor are they activities that students eagerly learn on their own. It shouldn’t surprise us when our students can’t magically do them on our assignments and exams.

12 http://www4.ncsu.edu/unity/lockers/users/f/felder/public/RMF.htm
Let’s suppose you decide to take on the job of helping your students learn to think creatively or critically. Can you equip all of them to be brilliant at it? No, any more than you or anyone else can turn them all into brilliant scientists and engineers—they don’t all have the talent. How about the ones who have it—can you do it for all of them? Probably not—some lack the motivation to do the required work. Well then, can you help the talented and motivated students become much better at creative and critical thinking than they were at the beginning of the course? Definitely! How? Easy—show them examples of the kind of thinking you have in mind; ask them in class and in assignments to complete tasks that require that kind of thinking; give them feedback; and repeat.

In the remainder of this column we offer examples of creative and critical thinking tasks you can easily incorporate into your course—any course, on any subject—that should require relatively little time to prepare and grade and not much expertise (if you’re worried about your own creative and thinking skills). To design more extensive instructional modules or courses on creative and critical thinking, consult references on those subjects. A particularly good source of information is Fogler and LeBlanc’s Strategies for Creative Problem Solving13, which also deals with critical thinking. Also, consider using a grading rubric to evaluate the students’ products and help them develop the targeted skill14.

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Creative and critical thinking: Idea generation and prioritization.

(Creative) List possible

- ways to verify a [calculated value, derived formula]
- ways to determine a physical property or process variable [as a function of one or more specified variables, with no instrument calibrations, using a stuffed bear]
- uses for [a specified object, a waste product]
- ways to improve a [process, product, experiment, procedure, computer code]
- real-world applications of a [theory, formula, algorithm]
- safety or environmental concerns in [an experiment, a process, a plant]
- flaws in a proposed [design, procedure]
- benefits of doing something differently from how it is normally done

You could stop right there, or you could go on to (Critical) Select the top three items on your list in decreasing order of their probable importance, and justify your selection.

Creative and critical thinking: Explaining unexpected results (perhaps the most important task scientists and engineers face, both in industry and in research). (b) In Part (a) of this problem, you calculated that the cantilever support should fail when the applied load reaches 5.5x10^4 N. Suppose a test is run and the support fails at a load of only 2.1x10^4 N. (Creative) List at least 10

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possible reasons, including three or more that involve assumptions made in the calculation. (Critical) List the top three reasons on your list in decreasing order of their likelihood, and justify your selection.

Creative and critical thinking: Problem formulation.
“[Make up, make up and solve] a problem involving material covered in the past two weeks of [this course, this course and any other course you are currently taking]. If your problem requires only simple formula substitution and contains no errors, you will get a minimum passing grade. To get more credit, your problem should require high-level analysis or critical or creative thinking to solve.” Formulating the problem requires creative thinking, and determining whether or not it meets your criteria calls for critical thinking. Before you give the first such assignment, show in class several examples of poorly constructed and low-level problems and examples of well-constructed problems that meet your criteria.

Critical thinking: Selecting from among alternatives. Following are [two strategies for solving a given problem, two computer codes for executing a stated task, four alternative process or product designs, four possible explanations of given observations or experimental data]. Select the best one and justify your choice.

Critical thinking: Analyzing. Assign a complex open-ended problem, with the first task being to determine whether enough information is available to get a solution, and if it isn’t, to figure out what more is needed and how to find it. Another analysis problem involves an ethical dilemma. The following scenario describes the case of [an employee who learns about an illegal activity that involved his supervisor; a graduate student who discovers that her research advisor altered experimental data]. List and discuss possible courses of action and make and justify a recommendation.

Critical thinking: Critiquing. Read and critique the attached [article from a popular scientific journal, op-ed column in yesterday’s paper, transcript of a televised speech or interview]. Your critique should include an evaluation of the accuracy and persuasiveness of the opinions expressed and should identify stated and hidden assumptions, misleading statements, and inaccurate and unproven claims.

Critical thinking: Grading. A student who took this course last year submitted the attached [project report, design, essay]. Give it a grade and summarize your reasoning.

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Whichever of those exercises you use, there’s a good chance many students have never been asked to do anything like it before. Don’t ask them to do it without first giving them a clear idea of what you are looking for. A good way to do that is to first show several good and bad examples of student products in class, state how you would grade each one, and explain what makes them good or bad. Then give several more examples, and for each one, (a) have the students rate it individually; (b) have them compare their ratings in pairs and reach consensus on the appropriate rating; and (c) share your rating with them and discuss your reasoning. After several such exercises they will all know what you want them to do, and most should do reasonably well on their first attempts and much better thereafter. By the end of your course they may not all be brilliant creative or critical thinkers, but they will have taken a major step in that direction.
Rebecca Brent is an education consultant specializing in faculty development for effective university teaching, classroom and computer-based simulations in teacher education, and K-12 staff development in language arts and classroom management. She codirects the ASEE National Effective Teaching Institute and has published articles on a variety of topics including writing in undergraduate courses, cooperative learning, public school reform, and effective university teaching.

Richard M. Felder is Hoechst Celanese Professor Emeritus of Chemical Engineering at North Carolina State University. He is co-author of Elementary Principles of Chemical Processes (Wiley, 2005) and numerous articles on chemical process engineering and engineering and science education, and regularly presents workshops on effective college teaching at campuses and conferences around the world. Many of his publications can be seen at <www.ncsu.edu/effective_teaching>.
The Case for Historical Re-Enactments
Hanan Kholousy, History Department (adapted from CLT Day poster with the same title)

Abstract
The main feature of my capstone seminar, “The Marriage Crisis and the Middle East” (HIST 4215) is an historical re-enactment based on two early-20th century Egyptian court cases. The students perform it at the annual History/EURECA undergraduate research conference before their peers and professors. At the beginning of the semester, I provide students with two interrelated personal status cases. These cases are about the same couple who divorce due to the husband’s second marriage to a British woman and battle for custody over their two children. Throughout the semester, the students work closely together to research the marital, social, political and economic issues as well as the historical setting of their cases and legal rights of their characters. They then write the script, find the attire and props appropriate to 1920s Cairo and perform a historically and legally accurate re-enactment of the cases at the end of the semester.

Learning Outcomes
• Hone public speaking skills
• Acquire research skills
• Analyze primary and secondary sources
• Develop writing skills
• Understand different perspectives and experiences
• Apply historical and legal knowledge
• View history as a composite of various and competing narratives
• Demonstrate contemporary and real world applicability of history
• Appreciate creativity as a central platform for learning

Historical Setting
It’s 1920s Cairo. Egypt still has not achieved full independence from Great Britain, although Egyptians are running their internal affairs, especially their legal systems. The country is on the brink of the Great Depression and most Egyptians are suffering from low wages, high inflation, and rising costs of living. Many are noticing the rapid changes affecting the country. The government is on a mission to ‘modernize’ Islamic laws. The middle and upper classes are sending their daughters to schools en masse. More and more women appear on the streets of Cairo and Alexandria unveiled, inspired by Huda Sha’rawi’s women’s movement and removal of her veil just a few years earlier. The pages of the press are covered with debates over the marriage crisis, the scandalous cases in the Islamic courts, the campaign to abolish prostitution, the economic depression, and the domination of the British over Egyptian affairs. People of all classes continue to marry, divorce, and raise their children the best they can in these tumultuous political, social, and economic times.
Evaluation

The students are evaluated based on:

• Their research of primary and secondary sources
• Their attention to, and representation of, historical detail
• Their comprehension of the legal, social, political, and economic issues of the case

Feedback

While students are often first intimidated by the assignment and especially the thought of acting before their peers and professors, they quickly develop a passion and excitement for the project that is on full display at the re-enactments. Each semester, their performances are well received and encourage many students in the audience to enroll in the course the following semester.

One student, Nadine Aboulmagd, gave this feedback:

“The main event was the play at the end of the semester which students had to produce the scenario for and enact according to a brief the professor had set earlier in the semester. It was an end of semester project as well as a fun, interactive and creative way to settle the course material in the students' minds.”
Cross-cultural Pedagogical Exchange: Dialogue between AUC and Partner Universities from the Arab World, the Global South and the West

Mohamed Fahmy Menza, Core Curriculum (adapted from CLT Day poster with the same title)

Abstract

In the wake of the events of September 11, 2001, the Core Curriculum sponsored a special project designed to use Internet videoconference technology and other forms of communication to promote dialogues between AUC students and their counterparts form a host of backgrounds and disciplines from all over the world. An informally dubbed ‘Dialogue Project’ evolved in a number of different directions, the most significant being the establishment of a three-credit-hour course focused upon a weekly videoconference. The Dialogue Project also sponsored a special topics course titled ‘Arab and American Identities in Tension’ which brought students from AUC, the American University of Beirut and the University of Washington together in a small village in Cyprus for two-three weeks each summer to live together and discuss issues concerning the relationship between the United States and the Arab World. In the wake of the Arab Spring the Project also introduced two new academic courses that are mainly based on partnering with universities from the Arab World and the Global South, ‘The Arab Spring in Arab Eyes’ and ‘South-South Dialogue’.

Learning Objectives

1. 150 average number of AUC students who enroll in our dialogue courses annually
2. 21 # of countries partnered with since 2001
3. 36 # of universities
4. 5 # of continents with established contacts

Learning Outcomes:
The dialogue course aims to bring together students from different cultures alongside counterparts from AUC in order to explore a diverse set of issues pertaining to the social, economic and political contexts of a wide variety of countries in the Arab World, the Global South and the West. In doing so, it addresses these selected current and possible future issues from a regional as well as a global perspective. By the end of the course students should be able to utilize the videoconference technology in: a-conveying/reflecting upon their own opinions, b-enhancing their knowledge about the similarities and differences between different cultures and c-improving their critical thinking skills.

Course Components

Attendance & Participation……………25%
Presentation…………………………15%
(Students will assess their peers in presentations according to guidelines set by class)
Reaction Papers……………………30%
Final Research Paper……………….30%

Conceptual Framework

How do we define ‘Dialogue’?
- Ongoing process of ‘responsive understanding’; involves both the heart and the mind
- People participate in dialogue both as individuals and as group-members;
- Power, privilege, and culture are underlying themes
- Transition of dialoguers from the polite/angry mode to meaningful engagement in dialogue is possible with continuous reflection on one’s own thoughts and feelings;

Facts and Figures
Feedback

The Video Conference Dialogues Have Helped Me Improve My Critical Thinking Skills

The Purpose Of Using The Videoconferencing Technology Is Clear To Me

Through The Videoconference Dialogues, I Now Feel That I Have A Better Understanding Of The Perspectives Of Those From Other Cultures

"Videoconferences with students from different countries - all with similar socioeconomic and political backgrounds - have really given me insight into my own country and how there are so many opportunities...we can use their past experiences to push Egypt forward".

Shirwet Sadek, Global South (Spring 2013)
Blended Learning at AUC: An Overview

Aziza Ellozy
Director, Center for Learning and Teaching

Significance
In AUC’s new strategic plan, President Anderson talks about our “need to become more sophisticated in our use of the new information and communication technologies” in teaching and research and adds a little later on that: “The Center for Learning and Teaching will also supervise and support the introduction of blended and online courses in a limited and careful way ensuring that we maintain our quality standards and use appropriate analytics to track student success”. (p 17)

In November 2014, CLT organized a Blended Learning Day to raise awareness of blended learning at AUC, and share progress on this front so far. The keynote speaker was Charles R. Graham, Professor of Instructional Psychology and Technology at Brigham Young University who is an expert in the design and evaluation of blended learning environments as well as the use of technology to enhance teaching and learning. This newsletter briefly shares the history of the development of blended learning at AUC, as well as plans for the future.

Origins

In the spring of 2012, during the presentation of his strategic plan for the academic area, the late Provost Haroun identified online learning as one of AUC’s strategic goals. This issue took on special interest when the administration was forced to close the campus for extended periods of time as a result of several crises. The first major crisis occurred in the fall of 2009 with the H1N1 alert during which the university closed twice for a total period of three weeks. This was followed by the student rebellion and the “closure of the gates” events of the 2012 fall semester. The third, and hopefully last, crisis occurred during and after the 30th of June 2013 events when many instructors teaching summer courses were asked to resort to some distance learning measures.

Starting with the first major crisis, the Center for Learning and Teaching (CLT) collaborated with University Academic Computing Technologies (UACT) to offer numerous trainings and full support to faculty during the suspension of classes. In each case it was apparent that a large majority of faculty were inadequately prepared to deal with the situation. Ultimately these “crisis management” efforts did not necessarily result in additional faculty subsequently adopting digital technologies to supplement or enhance their face-to-face teaching, and for most the focus lasted only during the critical period.
In January 2013, the Provost earmarked the ASHA grant of 2013 for “e-learning” and the Center for Learning and Teaching submitted a proposal to “procure equipment to enhance online, blended, mobile, and web-enhanced learning capacities at AUC.”

During that same month, President Anderson convened a number of faculty for a conversation about the “online world and AUC”. As a result of this initial meeting, in May 2013 the President formed a Task Force on Blended Learning charged with developing a systematic approach to offering blended courses at AUC, the mandate being specifically to "develop guidelines and best practices for an institutional implementation of blended learning at AUC and to assess AUC’s readiness for such an initiative".

2013 – 2014

In the summer of that same year, task force members were chosen and the task force started its work in the fall of 2013. One of its first orders of business was to make it very clear that blended learning was not about contingency plans to go online in moments of crisis. It also went on to adopt a definition for blended learning based on that of the Online Learning Consortium, (the leading professional online learning organization in the US), namely:

Blended learning courses are defined as courses that integrate online with traditional face-to-face class activities in a planned and pedagogically beneficial manner; and where a portion (institutionally defined) of face-to-face time is replaced by online activity. (Emphasis added)

The Task force concentrated on four areas and made subsequent detailed recommendations to the President regarding these four areas:

Faculty Support and Instructional Design Support
   a) Institutional Planning/Support and Quality Assurance
   b) Student Support
   c) Technology Support

I am happy to say that many of the recommendations of the Task Force were implemented, including the formation of a standing Committee on Blended and Online Learning in May 2014. The Committee reports to the Provost, is chaired by Associate Provost Ted Purinton and includes several representatives from CLT, four Deans and four Associate Deans representing Schools and Graduate Studies as well as representatives from the office of Data Analytics and Institutional Research (DAIR). The charge of the committee is to set or recommend policies and strategies at the University level for blended and online instruction.

One of the first tasks of the committee was the formation of an ad-hoc subcommittee for vetting blended learning proposals. Last April (2014), faculty submitted proposals for developing blended learning courses, and on the recommendation of the ad-hoc subcommittee, the Provost awarded grants to four faculty to design, teach and assess blended learning courses, with the explicit condition that the awardees attend a blended learning workshop offered by CLT and open their courses for formative and summative evaluation to inform future plans at AUC. The awards went to faculty members from the departments of Construction Engineering (Ezzeldin Yazeed, “Advanced Topics in Construction
Engineering”), SAPE (Carie Forden, “Community Psychology”), as well as the TAFL Program (Raghda Essawi, “Methods of Teaching a Foreign Language II”) and the TEFL Program (Lori Fredericks, “Research Methods in Applied Linguistics”).

In the **summer of 2014**, CLT ran the first 3-week “preparation-for-blended-learning” workshop for faculty, and continued to offer follow-up instructional design and course development support as awardees designed their courses during the summer and early fall.

In **April 2014**, the ASHA grant was awarded to CLT to lay the technical groundwork for developing online, blended, mobile, and web-enhanced learning capacities. This goal is to be achieved by 1) establishing a general e-learning unit at CLT; 2) equipping lecture capturing classrooms and availing mobile video conferencing units; 3) establishing an e-content development lab for the School of Sciences and Engineering; 4) establishing two Arabic language e-content development labs in New Cairo campus and in Zamalek campus; 5) establishing a general video production unit.

**2014 – 2015**

In **September 2014**, the Committee on Blended and Online Learning continued its work with an expanded membership, and in **October 2014**, a blended learning vetting subcommittee was designated to review the redesigned courses (based on specific criteria that had been developed). The subcommittee will continue to be responsible for vetting all blended course proposals. It was decided that AUC will not permit courses to be offered in a blended/online format without approval from this subcommittee on their design.

In the **spring of 2015**, the first formal blended learning courses will be offered at AUC and will be assessed by CLT during and after the semester is over. A call for other blended learning course proposals will be made during that same semester and CLT will offer a training workshop for interested faculty. This, in a nutshell, is a summary of the work that has been done so far to get this initiative off the ground.

The Committee for Blended and Online Learning will consider various possibilities for the expansion and utilization of blended and online courses and will provide detailed proposals to the Deans’ Council, the Schools/ departments/ centers/ faculty senate etc. depending on the relevancy.

The Blended Learning Program is still in its infancy at AUC, and while AUC is very late in the game, we have the advantage of learning from others, and we will proceed at a pace that is purposefully in tune with programmatic needs.

CLT has faculty and staff who are well trained to meet the needs of the University. Although we are challenged by budgetary constraints and staff reduction plans, we aim to build capacity within programs and departments to ensure sustainability as the program evolves.

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15 Feedback was sought and will continue to be sought from workshop participants, and based upon it the workshop will continually be revised and offered for faculty who wish to blend in future semesters.
This newsletter is a follow-up on our last one where we described our experience with digital narratives within the context of a freshman course. We were, and continue to be, agreeably surprised by the quality of the narrative, the seamless integration of text, image and music, and in general by the hard work that the majority of students put into these projects. We were also quite impressed at how the students who, contrary to popular belief, had never used iMovie or Moviemaker, had never written a storyboard or drawn a concept map, could quickly to acquire these new skills without difficulty.

Feedback
To evaluate the impact of this type of project on students, we conducted an in class anonymous survey with clickers, to which 50+ students from two sections responded. Some of the results are shown below.
1. Our original objective was met: students recognized that by creating a digital narrative of the assigned chapter they understood the process of science and the scientific method better than if they had only read the chapter.

2. Students felt that working in groups was the most important factor that helped them progress in the project including peer feedback and seeing others’ work.

3. Of all the skills that they learned (concept mapping, story boarding, creating movies with narration, using a wiki) 37/49 students chose concept mapping as the skill that they would use in other courses.

The students’ open ended comments fell mostly into three categories: the group dynamics, the nature of the project and the use of technology. A sample of these comments follows

**Group dynamics**

- “I could not have picked better partners and workers if I tried...I am pleased with our work and our group, no one received the full load on their shoulders, no one slacked off or disappeared, and we worked well together. I want to thank the professor for the opportunity she gave us, as well as thanking my group for the remarkable work we produced together. **This is really the first and only group project of my university career that I have ever enjoyed so far.** [ a senior]

- “At this point in time I can really say I am proud of my group’s product. It was a project that required using a lot of creativity and an opportunity to work in a group. However, I learned from this experience and other previous ones that teamwork does not always work well...This...reminded me of something I had learned in my Sociology class: **social loafing**…”
Nature of the project:

- “What I thought was going to be a long, hard project turned out to be something that I really enjoyed doing and learning from, and would not mind doing again. So thank you for a really great experience…”
- “This was one of my favorite projects that I worked on this semester. What amazes me is how a chapter in a book that might be described as boring by some people can be turned into an interesting short movie”.
- “the project has made us more attentive and interested in class because the class was greatly related to the concepts in the chapter.”

Technology

- “This experience was very useful as it expanded our horizon of using technology.”
- [we learned about] “the vast services that are located here at the university, we have met many helpful people who were more than willing to help us throughout the whole process, especially the multimedia lab where we uploaded the video.”

A Final Comment

Faculty might be hesitant to introduce digital narratives into their curriculum if they fear their own lack of familiarity with technology will hinder their ability to guide and evaluate their students. However, the depth, quality, and clarity of a student’s work can be evaluated regardless of the medium (Ohler, 2009), and there are numerous resources on campus to assist both professors and students with new media projects. For teachers apprehensive about project evaluation, it can be helpful to establish and distribute a grading rubric prior to beginning the project, emphasizing the importance of content over flair.

Faculty might also hesitate because they fear such a project will be less intellectually rigorous than more traditional forms of assessment. But as Michael Coventry (2006) argues in his article Moving beyond the Essay: Evaluating Historical Analysis and Argument in Multimedia Presentations, “Like a successful research paper, a successful multimedia narrative project…is based on solid research and analysis and is the product of multiple drafts and revisions.”

As with any assignment, the level of difficulty is up to the teacher, and the project’s success should be predicated on the student’s mastery of the material.

Additionally, digital narratives have added benefits not necessarily found in essays and exams. Because of their narrative structure, students must contextualize their argument or analysis, and the process of selecting audio and visual components can stimulate creative synthesis. Many teachers (Oppermann, 2008; Leon, 2008) found that the medium – both more informal than a term paper and for students used to online content creation, more familiar – made students feel more confident or authoritative, and thus encouraged them to take imaginative risks. Finally, the structure and duration of these assignments encourages students to slow

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16 Should you wish to experiment with digital narrative projects, CLT can assist and support you in developing and implementing such projects.
down and engage the material in greater depth and with more purpose, while including peer evaluation discourages them from submitting something cobbled together at the last minute.

This form of learning assessment is infinitely adaptable, and has been used successfully in medical school (Sanders, 2009), science (Genereux, 2008), social studies (Opperman, 2008) and education (Borgelt, 2009).

CREDIT: a special thanks to Laura Delancey who helped us with the literature survey

SOURCES
The ‘Wicked Problems’ of Pedagogy and Teaching with Technology

“Wicked problems occur in any domain involving stakeholders with differing perspectives”

(Conklin, 2005)

Aziza Ellozy, Director, Center for Learning and Teaching

When I started this long overdue newsletter the first week of September, I wrote:

“I would like to welcome you all to this new academic year and hope that you will have a very productive one in the midst of all the changes we are incurring. If you’ve had a chance to look at CLT’s list of workshops this semester, you will notice that we have larger offerings than usual and also a greater diversity of themes. We actually had to restrain ourselves from offering even more. My point is that this large diversity is a reflection of the complex landscape of what teaching and learning has become. What, how, where and when we teach is changing and our task is much more challenging than it ever was”

Little did I know that we were going to face what has been one of the most daunting tests in AUC’s recent history. In a sense, the events of the September 16th, 2012 to September 30th, 2012 gate closures have been a wakeup call for all of us on many fronts. In this newsletter, I will limit myself to the urgent problem that we faced resulting from the need to use technology to teach online when our campus and classrooms were off limits. In the bigger picture, this very problem ties in well with what I was referring to in the previous paragraph as “the complex landscape” of teaching and learning. It is this complexity that I wish to address, and for this I will use the concept of the “wicked problem”.

I first became aware of this concept when reading an article on pedagogy as a “wicked problem” (Ellsworth, 2011). As time went by and as the events of the last few weeks unfolded, the concept has taken multidimensional meanings for me: the on campus conflict was a wicked problem, the closing of the gates was a wicked problem; the need for temporary launching of online and blended learning was a wicked problem. I saw wicked problems everywhere.

So what is a wicked problem? The term was originally coined in the field of urban planning and the best way to describe it is by first defining its antithesis – the tame problem. Chess is often used as an example to describe a tame problem: it can be very complex but it has well defined rules and goals and always has a solution. This is why we can design computer programs that can beat the most sophisticated chess players in the world. By contrast, wicked problems are those problems that do not necessarily have a unique solution. They are problems that are inherently social in nature arising from complex cause and effect relationships.

The concept of wicked problems was first introduced in 1973 by H. Rittel and M. Webber, in their landmark article “Dilemmas in a General Theory of Planning”. As urban planners, both of them recognized that “the kinds of problems planners deal with – societal problems – are ill-defined, are never solved. At best they are re-solved, over and over again”. Later
Conklin (Conklin, 2005) generalized the concept of wicked problems to areas other than planning. Here are some important characteristics of these problems:

- They are problems that have no definitive formulation
- Each one is unique and contextual
- There is no template to follow when tackling them
- Every solution is a 'one shot' solution. They are neither right or wrong, just better or worse
- There is no clear end, no 'stopping rule'
- There is no immediate test of the solution
- It is hard to measure success and the problem is never solved indefinitely

It has been argued that pedagogy and teaching are wicked problems. In “The Wicked Problem of Pedagogy, An Afterword”, Ellsworth eloquently argues that

“In the end, education isn’t a question of appropriate, acceptable, or productive formats… This is because pedagogy is not a system and cannot be systematized… What is set up in a pedagogical design and what students and teachers actually take up are neither scripted nor linear. To think pedagogically is to think in terms of, and in the midst of, situations and the highly particular.”

And although most of us have a “script” in mind as we design our syllabi, as we enter our classrooms or as we assess our students’ learning, we also know that truly enriching teaching experiences are the ones that are not scripted, that are unique and that lead to learning as “an experience of thinking – sensing - becoming different”. This makes it necessary for us be ready to attune our responses to the abilities and interests of our students. We learn to be skilled at collecting and interpreting the various indicators of our students’ learning [CLT’s mid-semester assessments help!] and to use the information to decide on how to adjust and to respond creatively to what ultimately may be unique challenges, and in so doing hopefully increase our students’ chance at successful learning.

Hence teaching, which needs to take into consideration the students’ background knowledge, the curriculum, the inherent diversity of students in a course, the culture of the institution, the pedagogy of the discipline, the accreditation process, the learning space, etc. has many of the characteristics of a ‘wicked problem’. And that is what makes evaluation of teaching such a difficult task.

Dr. J. Swanson made a very compelling presentation17 to the 850 ‘Scientific Thinking’ students a few weeks ago, explaining why AUC’s low rating in the Shanghai rating systems and others, is in no way a measure of the quality of teaching at AUC. Teaching, he said, never enter in these ratings. Why so? Well because quality of teaching is hard to quantify – it has no definitive formulation.

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17 I would encourage you to watch it at [http://lectures.aucegypt.edu/Panopto/Pages/Viewer/Default.aspx?id=c76ac5d6-7119-416a-a0b3-a17dc085174f](http://lectures.aucegypt.edu/Panopto/Pages/Viewer/Default.aspx?id=c76ac5d6-7119-416a-a0b3-a17dc085174f)
Now throw into the mix the need to integrate technology in the teaching and learning process (and there is no question that this has become an imperative) and you would get an even “wickeder problem”.

What is there to do then since most of us go on acting as though teaching were a tame problem? Don’t we have defined goals? Defined learning outcomes? Defined curricula and accepted ways of assessing student learning? Why the need to change? Because the message from educational reformers is loud and clear: our responsibilities in educating for the 21st century is dramatically different than it was before. We need to prepare students for living and working in a world that is increasingly more complex, “that will always breach what we think we know”, “for jobs that don’t yet exist, using technologies that have not yet been invented in order to solve problems that we don’t know are problems yet.”

On this note, I will leave us all to reflect on these two ‘wicked problems’, to recognize them as such and to remember that “wicked problems aren’t solved, they are only addressed; they are treated not cured”. I will also remind you that CLT’s job is to work with you and to find together the ‘one shot’ solution to improve what you have already been doing quite well.

**References**


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18 Did You Know?/Shift Happens” is licensed by David S. Rose, Karl Fisch, Scott McLeod, and XPLANE under a Creative Commons Attribution Non-Commercial Share-Alike license [http://www.youtube.com/watch?v=XYQ1ULfQaww](http://www.youtube.com/watch?v=XYQ1ULfQaww)
Blogging: A Powerful Tool for Student Self-expression, Reflection and Knowledge Construction

Gihan Osman
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Since their emergence in the mid-nineties, blogs have spread exponentially as a tool for individual and professional micropublishing. Their adoption within education has been much slower. However, there are many who advocate blogs as a transformative educational tool (Williams and Jacobs, 2004).

A blog, short for web-log or web-based log, is a Website to which an individual or group can publish content to the Internet without web-programming skills. Blog posts are habitually text-based, but can also include videos, images, voice, and hyperlinks to other posts within the blog or other pages on the Web. Most blogs also contain a “comment” button that allows others to respond to a blog post. Posts to a blog are usually published in reverse chronological order, from newer to older posts. They can also be tagged and archived. Moreover, blogs have a continuum of privacy settings; ranging from private individual blogs, to group semi-private blogs that would allow a limited set of individuals to view and comment to the blog, to public blogs that can be found by anyone on the Internet. It is due to these technical affordances for interactivity and user-friendly publication that blogs present a powerful tool to facilitate student learning.

One of the most powerful uses of blogs within education, in my opinion, is integrating it as a medium for self-expression, reflection and knowledge construction. Educational blogging for reflection is often based on the traditional learning journal or log, which is maintained by the individual student to document his/her reflections on the learning content and process. This log is usually shared with the instructor as a method to assess students’ development and a venue to provide feedback, thereby encouraging engagement with the subject matter and promoting active learning. However, one disadvantage of such journals is that they leave learners with feelings of isolation and often limit the feedback and idea exchange (Hall and Davison, 2007).

Weblogs can capitalize on the advantages of keeping a learning journal while simultaneously addressing some of the concerns. Due to their communal nature, blogs provide students with a venue for legitimate self-expression, thereby encouraging them to develop their unique voices (Oravec, 2002) and increasing students’ sense of ownership of their thinking and learning (Ferdig and Trammell, 2004). In addition to the instructor, the student can share his or her blog with the entire world, with the whole class or just a limited group of students. This potential for collaboration increases students’ opportunities to develop their communication skills. Blogging for a group of students also allows learners to receive individualized feedback from the teacher and from their peers, thus expanding the exploration of ideas and multiple perspectives, enhancing opportunities for cognitive conflict, and thereby possibly leading deeper thinking and knowledge construction (Windham, 2007).

The interactivity of blogs also develops a sense of community among learners and provides...
the possibility for establishing opportunities for engagement that transcend the limits of class and course. All the above pedagogic benefits for blogs are in line with social constructivist theories of learning (Vygotsky, 1978).

A few semesters ago, I used Blogs as part of a graduate Organizational Behavior class to enhance practicing managers’ quality of critical thinking and to help them make connections between abstract theories covered during the courses and their experiences in the workplace (Osman & Koh, 2013). Students felt engaged with the subject matter, made substantial theory-practice connections, developed as sense of community, and valued the use of reflection as a tool for learning.

Guidelines for using blogging at medium of reflection

- Explain the importance of reflection a vehicle for learning.
- Do not assume that students are familiar with reflection and blogging.
- Provide different forms of scaffolding to facilitate quality reflection - through modeling, examples, guidelines, facilitation, and rubrics.
- Promote reflection and critical thinking over longer durations. Building these skills requires time.
- Relate students' reflections to class topics so that students see the value of reflection as an integral and legitimate ingredient of learning.
- Provide technical orientation at the beginning of the session. Some digital natives might not familiar or comfortable with blogging as a technology.

References:
“Blended learning” is a term that is increasingly heard on campus these days for good reason. At the faculty retreat in 2012, online learning was identified as one of the University’s strategic goals for the near future. As a variation of online learning, blended learning has become one of several key initiatives endorsed by President Lisa Anderson to support AUC’s endeavors towards increased access, outreach, and educational excellence. But what is blended learning? Why should we as faculty consider it as alternate format for course delivery? What challenges should we as faculty put into consideration? And how do we go about the transformation? This two-part article will attempt some possible answers.

Blended learning defined
Blended learning, also referred to as hybrid and mixed-mode instruction, lacks a unified definition. In very general terms, blended learning is a combination of traditional face-to-face instruction and online instruction. The Sloan Consortium (Sloan-C), one of the leading professional organizations focusing on online education, defined blended learning as: “1) courses that integrate online with traditional face-to-face class activities in a planned, pedagogically valuable manner; and 2) where a portion (institutionally defined) of face-to-face time is replaced by online activity” (Picciano, 2005, p.4). In its yearly report on the status of online learning, Sloan C determined that blended learning courses are those where 30-70% of instruction takes place online (Allen & Seaman, 2013). This definition differentiates between ‘web-enhanced’ courses in which online tools and activities are incorporated in a supplementary fashion and blended courses in which online components reduce and replace face time to become a highly integrated component of the learning experience. A visual example of integration within a blended course can be found on the University of Central Florida’s website at: http://blended.online.ucf.edu/files/2011/07/holland_venn_diagram.pdf

Why should we consider going blended?
Blended learning is often undertaken as an institutional strategy for three reasons: 1) enhanced flexibility and access for the teacher and student; 2) increased cost-effectiveness and other efficiencies; 3) improved learning outcomes (Bonk & Graham, 2005). As faculty we are probably most interested in the latter. As previously mentioned, going blended does not simply mean enriching a course with technological tools; it is an opportunity to consider course design more deliberately and to try new pedagogical strategies. The process of transforming courses to a hybrid format thus often leads to instructional opportunities that are more aligned to best practices for instruction.

There are, however, some that regard going blended as natural progression for instructional delivery formats sparked by advances in technology that compel integration of online
components. Millennial students joining universities today have grown up with technology and regard it an essential medium to communicate and learn about their world through their formal and informal ‘instructional’ experiences online. Blended learning combines the best of both worlds; the online components that add flexibility and comfort, enhancing access to a wider variety of learners, while maintaining the dynamic social components of instruction that are better achieved through face-to-face meetings (Senn, 2008).

Some challenges of blended learning
Despite its promises and potential, blended courses also present numerous challenges. As a variation of an online course, sustaining students’ motivation and commitment might require more attention and effort. It is also important to consider learners’ access and comfort with the various technologies employed during the course (More & Kearsely, 2004). For faculty members, redesigning and teaching a blended course might require more time and effort. Additional technical and pedagogical support may be required.

Next week's New Chalk Talk issue will provide a brief introduction to the design and development process for blended learning

References


Blended Learning: An Alternate Format for Course Delivery (Part 2)

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Although blended learning is believed to combine the best of face-to-face and online instruction, achieving the right blend from the pedagogical and practical perspectives adds a level of complexity that is unique to this mode of instructional delivery.

The design or re-design of a blended course can be accomplished by the course instructor. However, it is often recommended to undertake this project in collaboration with a team that can support the design and development process. Some typical members of such a team is: instructional designers, multi-media specialists, a librarian, etc.

The design and development process could be formal or less formal. However, it is usually iterative in nature and often entails a number of phases that ideally happen in sequence, but are often combined and occur simultaneously for practical considerations. One of the models that is often used to envision the process is ADDIE model for the design of instruction, which consists of 5 phases: 1) Analysis; 2) Design; 3) Development; 4) Implementation; and 5) Evaluation (Dick and Carey, 2001). Figure 1 depicts one of multiple visual representations for this model.

Figure 1. The ADDIE model for the design of instruction (Clark, 1995)

Analysis

During this phase, the instructor, alone or in collaboration, with the design and development team, defines the goals for the blended course. It is also the stage at which the learners’ needs are carefully considered. Some of the issues to examine in that regard are the learners’ goals, their existing knowledge and skills in terms of the subject content, their language and technology competencies, their access to technology and other relevant resources, their cultural and educational background, their previous experience with online instruction,
possible learning challenges, etc. It would also be important to focus on the instructor at this point in terms of their reason for choosing to go blended, their teaching philosophy and strategies they have used in teaching face-to-face classes, their comfort and skill with different technologies, etc. Some organizational factors to think about at this stage are the financial resources allocated for the course, the available forms of technical and administrative support, the technologies supported by the school, the possible constraints, etc.

**Design**
The design phase is backbone of the process. It should be deliberate and detailed. It usually starts as a close consideration of the course outcomes and learning objectives, and the assessments used. This is usually followed by a consideration of the learning activities and strategies that would facilitate the achievement of outcomes and objectives. The integration of the face-to-face and online components is carefully considered. Technologies that will facilitate the course activities will also be decided upon. This phase often results in a number of additional deliverables that focus on design plans for communication and interaction within course, the interface and visual design of the course as well as prototypes and storyboards that demonstrate the elements of this design to the instructional developers later on.

The challenge for designers is to create a course that demonstrates effective instructional strategies that not only focus on low level cognitive skills but that help learners engage in higher order thinking skills such a problem solving, critical thinking and creativity (Moore & Kearsley, 2004). It is also important to consider affective factors in the design of instruction to maintain learner motivation and commitment

**Development**
The phase is often undertaken by instructional developers and graphic designers who translate plans resulting from the Design Phase into instructional materials that help learners achieve the learning outcomes. This also the stage at which the training of instructors or/and teaching assistants takes place (Moore & Kearsley, 2004).

**Implementation**
The phase entails the actual delivery of the course to students that is implemented according to the plans outlined during the Design Phase. Training students to use new technologies utilized during the course often takes place at the beginning of this phase.

**Evaluation**
Evaluation and subsequent revisions are essential embedded activities during ADDIE, and continuously take place during different stages of the design and development process (See Fig 1). Additional forms of formative and summative evaluations are integrated during the implementation or delivery of the course. These inform future revisions on the course, but might also influence departmental and university-wide decisions regarding blended learning.

**References**
Critical Citizenship in Practice

Maha Bali, Senior Manager, Pedagogy and Assessment, Center for Learning and Teaching

...creating a humanistic culture that values the desire to learn from the unexpected and uncomfortable sources as much as it values the critical faculties would be an important contribution to our academic and civic life. (Roth, 2010)

I start the Fall 2013 semester with much excitement and trepidation. In response to this summer’s events, I reflected on the role of higher education in the midst of the political upheaval Egyptians now face (Bali, 2013). I proposed a new understanding of critical citizenship that goes beyond developing critical thinking, towards promoting a culture of social justice and empathy in our students. The first comment on the article by Amina ElBendary (AUC History department faculty) shared concerns about teaching in these difficult times when there is so much division, and how to create a safe environment for discussing these issues. I share the same concerns about how to use the classroom in ways that are productive and promote learning while at the same time keeping the classroom a safe environment rather than replicating the political conflicts outside. As Pandeli Glavanis pointed out in an email, there is a "need to maintain academic freedom while ensuring civil debate on campus among students, staff and faculty". In a recent workshop I gave, faculty shared similar concerns. There are those from disciplines that cannot ignore this topic (e.g. journalism, political science), and there are those from disciplines that have a choice to include such topics (e.g. most social sciences and humanities). But even disciplines that would seemingly be unaffected (e.g. sciences and engineering) cannot ignore the possible underlying tensions that students would bring with them to the classroom (let alone our own tensions as faculty).

Edward Said, political activist though he was, felt strongly about separating his politics from his teaching. However, this does not mean completely ignoring the political context we live in, because good pedagogy "requires sensitivity to context, history, and cultural and economic circumstances" (Nussbaum, 2011, p. 157). We are not unaffected, and neither are our students.

While the Center for Learning and Teaching (CLT) has been able to provide support for faculty in terms of ways of incorporating technology to deal with potential interruptions to classes, we have less experience on teaching during such political divisions. I thought 9/11 must have been a similarly pedagogically difficult situation. I found some useful tips from Vanderbilt University's website on teaching in times of crisis (Chick & CFT staff, 2001/2013) shared by my colleague Gihan Osman. They suggest that it is usually better to do something, to acknowledge what has been happening, than to ignore it. Among the ideas they suggest are:

- Taking a moment of silence
- Minding the cognitive load (by this they mean for faculty to be empathetic and accommodating to how tensions and anxieties outside the classroom affect students' capacity to learn effectively)
- Assigning relevant activities or materials
Facilitating a discussion, possibly involving the university's counseling center

The website has useful tips on managing difficult conversations and also has links on creating safe spaces for communication and managing hot topics.

After the January 25, 2011 revolution, many faculty were eager to incorporate the revolution in their courses (Bali, 2011). Bringing in the outside political environment into our classes this time around can be a big risk. It is also a tremendous learning opportunity, and one can argue that the political situation will come into our classrooms whether we invite it or not.

Having no expertise in handling such situations myself, I sought ideas from the American University of Beirut (AUB), who have much more experience dealing with political upheaval. Though my contact there had no specific tips to give me, she pointed me to the importance of community outreach, and how, though AUB’s Neighborhood Initiative, they learned to appreciate "the value of creating a process that leaves time (and gives intellectual space) for vagueness, for undirected learning" (Myntti, 2013). There is no doubt that experiential learning that involves community outreach via extracurricular activities or community-based learning have a role to play in developing responsible citizens (Glavanis, 2011; El-Taraboulsi; 2011, Bali, 2013). Do you have any specific thoughts or ideas that you would like to share with the rest of the AUC community? Have you found useful resources to support you this semester? If you are willing to share those ideas/resources with the rest of the community, we are starting a wiki collecting those ideas to be shared with the AUC community at https://sites.google.com/a/aucegypt.edu/criticalcitizenship/. Please send your contribution to bali@aucegypt.edu or clt@aucegypt.edu. [We are also available for one-on-one consultations, even though we have limited experience]

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Bridging the Great Divide (Part I)
Teaching to Interest
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Part of our professional development as higher education professionals is to stop and reflect on the approaches, content and techniques we employ to facilitate teaching and foster effective learning. This is paramount when dealing with first year students as they cross the great divide from high school to college level education. We, as faculty at AUC, often observe that some students are not engaged or fail to transfer skills, attitudes and knowledge attained in their first year at college to the courses within the major they ultimately choose. How do we best deal with this vital transitional year and how do we excite our students about learning and engage them in their college level courses?

If we assume that there is a missing link in the first year, how can we close the great divide and engage more effectively with our students?

During the work of the Freshman Program (FP) task force in 2011-2013, unanswered questions and concerns loomed large and the group’s mandate was challenging. One of these challenges was to envision a re-designed FP that ultimately addressed the following problem statement:

“Over the past decade and more, in speaking with outside accreditors, members of the Board of Trustees and others, AUC faculty have often expressed the view that too many of the students in their classes lack the reading, writing and critical thinking skills needed for success in university-level work. Many specify, in addition, that students entering major study do not have sufficient knowledge about how to construct well-argued essays and assignments, make proper use of evidence, and correctly draw on, and cite, primary and secondary sources. Although opinions differ as to where responsibility for this lies, there is general agreement that AUC students face significant challenges in these areas, and that the University is not addressing these issues as effectively as it should.

For many, this problem has only been exacerbated by the recent growth of new programs, new emphasis on research, and other factors that take the time and energy of full-time, professorial-rank faculty away from teaching students in the Core Curriculum, especially at the foundational Primary Level. The result has been too much reliance on adjunct faculty and an increase in class sizes in many courses taught at this level; students, and their parents, complain that they are not getting the quality they expect (and pay for) in a Liberal Arts institution such as AUC.\footnote{Adapted from proposal for FY program at American University in Cairo, March 2013.}

I recently stumbled upon an article written by John D Sutter for CNN Opinion. The piece flipped an aspect of journalistic writing and was quite rightly named “The people have spoken”\footnote{The people have spoken. John D Sutter, CNN. Retrieved June 18th 2013.}. In a nutshell, CNN held a poll asking readers to vote for the story from a list that they would most like to read about. This is, as the author states, “journalism as democracy-rebalanced to give the readers power”.

Adapted from proposal for FY program at American University in Cairo, March 2013.

The people have spoken. John D Sutter, CNN. Retrieved June 18th 2013.
Among the winners were America’s widening rich-poor gap, Illegal animal trade, The world’s poorest children, Where rape is most common and America’s most endangered rivers. The author put aside his personal view on what mattered to readers and what he personally loved to write about and thought…why don’t we just ask them? And he did…

I stopped for a moment and reflected upon this context. Should we be asking students about what they want to learn and how they prefer to learn? Should we be prioritizing student interest in the content and themes we teach? Are we assuming we understand their concerns and interests when in fact many of us were in their shoes 20 years ago?

There are multiple approaches teachers can employ to foster engagement. To mention a few; purposeful and planned in-class discussion, collaborative group work, student-led class sessions, debates, multi-modal student projects…the list goes on.

As a probing exercise in the spring of 2013 Carol Clark, as Co-Chair of the FP task force, asked the three student representatives on the Task Force to select their top preferences from a list of proposed course titles. This was a very valuable exercise, albeit limited, enabling us to gauge to some degree “student interest”21 More importantly, this exercise recognized the need to “teach to interest”. In addition, the courses developed in the FP CORE/RHET tandem courses (courses taken concurrently and taught by the same faculty member or team-taught) took student feedback and interest into consideration as they were being developed, and faculty developed several of the courses that were selected by Task Force student members, in addition to others according to perceived student needs in the first year. Those courses were the following:

- **Expressions of Resistance: How can we react and respond to oppression?**
- **Civic Engagement, Public Leadership and the Right to be Human.**
- **How do we know what’s true?**

One thread common to all the approaches listed is simply stated-interest. If we can engineer courses, assignments, discussions, projects along the lines of student interest, it should at least help solve the problem of engagement.

That however would be a risky assumption. Many will debate the fact, and quite rightly so, that there are skills and content that students need to know, knowledge that is vital to understanding more challenging concepts in higher level courses. I tend to agree. However, my suggestion here for content-laden courses is that we stop for a moment and re-think the interplay between the “How” and the “what” of our teaching.

A few key questions come to mind.

- **How can we increase student engagement in class content and encourage class participation?**
- **How can we increase and ensure higher degrees of retention and transfer among FP students?**
- **How can we instill FP students with 21st century skills such as critical thinking and effective communication, which can help ensure student success in their majors and have been identified by faculty as student needs?**

This semester, New Chalk Talk will try to address these crucial questions and we hope this will lead to new conversations about our students and their engagement as we embark on a new Freshman Program.

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21 Email correspondence, Carol Clark, Department of English Language Instruction, Academy of Liberal Arts, American University in Cairo.
Bridging the Great Divide (Part II)
Learning Outcomes, Learning Communities and the New Freshman Program at AUC
Carol Clark
Chair, Department of ELI

Students enter AUC with high expectations, but after the first few weeks, they often express disappointment at the learning opportunities provided, which sometimes leave them lost and confused as they transition from high school to higher education. At the same time, professors complain that students’ reading, writing, and thinking skills are not adequate for study in their majors. To address these concerns, in fall 2011, Provost Medhat Haroun convened a task force to redesign the freshman year and core curriculum to better meet students’ needs and professors’ expectations, particularly in the areas of communication and critical thinking skills. Composed of faculty, administrators, and students from a variety of disciplines and student development programs, the task force envisioned a new Freshman Program (FP) focused around a unified philosophy, clear learning outcomes, and learning communities for students in their first semester.

Learning Outcomes for the New Freshman Program

In most university classes, students are expected to read complex texts critically, absorb new vocabulary and concepts, listen and take notes, give presentations based on projects or research, answer exam questions, and write correctly cited papers, as they apply critical thinking. Often these skills are assumed and are not directly addressed or taught; instead instruction emphasizes explaining concepts and conveying information. A learning outcome tells us what students should be able to do at the end of a course of study, including not only knowledge but also “skills, attitudes, competencies, and habits of mind that students are expected to acquire at an institution of higher education.” (“Providing Evidence of Student Learning,” 2012) The American Association of Colleges and Universities recommends that liberal education in the 21st century be accomplished through “studies that emphasize the essential learning outcomes across the entire educational continuum—from school through college—at progressively higher levels of achievement” (“21st Century Liberal Education,” 2013).

In keeping with this recommendation and with its own strategic goals, the task force identified FP learning outcomes in six key areas to be addressed during students’ first semesters at AUC. These outcomes include the communication skills of critical reading, oral communication, and effective writing; critical thinking skills (particularly analysis, synthesis, evaluation, and creativity); and the 21st century skills of information literacy and collaborative teamwork. To ensure that all learning outcomes are addressed in the typical student’s first semester, the concept of learning communities in higher education was adopted as a way to engage students with meaningful liberal arts content while training them in academic skills-based outcomes.
What is a learning community?
According to Gabelnick, MacGregor, Matthews and Smith, a learning community is a curricular structure which is intended to “restructure the curriculum to link together courses or course work so that students find greater coherence in what they are learning as well as increased intellectual interaction with faculty and fellow students” (cited in Magjuka, 2001, p. 19). Universities apply the concept in different ways. The new model at AUC defines a learning community as groups of first year students who take two tandem courses together on related (though not duplicated) themes. The tandem courses include a freshman seminar course (CORE 1010) and a writing course (RHET 1010) taught by the same faculty member or by two faculty. Faculty who share students are encouraged to meet during the semester to tailor connections, coordinate assignments, and share strategies to help students at risk of low performance.

To achieve this learning community model, the previous three Rhetoric and Composition (RHET) courses taken by most first-year students over three semesters were combined into two newly designed writing courses—one on analytical and persuasive writing for the first semester and one on research writing for the second semester—and the tandem freshman seminar course. The research writing course (RHET 1020), also theme-based, requires students to build on the skills acquired in the first semester and incorporate higher level learning outcomes leading to more student autonomy. When the new Freshman Program (FP) design was adopted by the AUC Senate in spring 2013, new courses were designed for the fall.

New Tandem Learning Community Courses
The Freshman Seminar—Writing (CORE 1010/RHET 1010) tandem course “learning community” ideally consists of a class of 16-18 students. The goals of the tandem courses are to 1) provide exposure to the liberal arts, 2) link writing skills instruction to meaningful content, 3) foster a sense of community among first semester students through a commonly shared experience, 4) promote critical learning habits across courses so that students realize the transferability of skills from one course to another, and 5) provide more exposure to varied genres of readings in the Freshman Seminar course as a basis for better writing in the tandem writing course.

The freshman seminar courses are interdisciplinary, discussion-based, and focus on critical issues and/or “big questions.” In addition to two already established seminar courses, i.e., “The Human Quest” and “Who am I?”, five new courses were designed (most of them to be taught in multiple sections) as tandem CORE 1010 courses for fall 2013. They include “Creative Expressions of Resistance,” “Filming Difference,” “How Do We Know What’s True?” “Imagining Exile,” and “Of Heroes and Demons.” These courses built on student and faculty interest and feedback and incorporated the new Freshman Program (FP) learning outcomes, particularly critical reading, oral communication skills, teamwork, and reflective writing, such as reading journals and response papers. Student-centered pedagogies such as small group discussions, oral presentations, debates, project-based, and experiential learning activities were incorporated to achieve the outcomes.
The tandem writing courses link thematically to each freshman seminar course but focus more on writing, information literacy, and critical thinking outcomes. Key elements include at least four major writing assignments: one low-stakes personal narrative, one formal analysis essay, and two persuasive or argumentative essays. The first two writing assignments closely parallel the tandem seminar course content; the second two connect thematically but may focus on a new direction for the theme, with different complementary readings.

As these new learning communities begin, students, faculty, and program administrators are all engaged in a new learning experience. Feedback will lead to improvements, and other new courses will be piloted and assessed in the spring. However, no matter how effective the new learning communities are, the skills acquired in them will need continual reinforcement in other courses at University. The process of incorporating the FP learning outcomes into new and existing courses has just begun, and over the next few years the goal is that every core curriculum course for freshman students will incorporate several of these vital learning outcomes to enhance learning and the student experience at AUC.

References


Educating Citizens: An AUC Priority?

Pandeli Glavanis, Director, CBL Program and Associate Director, CLT

Two of my colleagues at CLT (Maha Bali and Hoda Mostafa) have recently published essays that focus on, among other things, what and how we teach at AUC. As an engaged academic and primarily a “teacher” I welcome both contributions and ask them to indulge me the opportunity to engage in the discussion they have generated. First let me note that I greatly appreciate it when colleagues are motivated to be more thoughtful and critical of what and how we teach, and especially when they concern themselves with the fundamental question for all “teachers”, namely, “what we seek to achieve through our teaching and scholarship” (Nelson, 2012: 1). Nelson then goes on to set the parameters within which we can start to answer such a question. She notes that “an analysis of the possible impact that education can have moves beyond the standard questioning of pedagogy, and speaks to the societal value of education as transformative, not just for the student and future graduate but also for society”. (Nelson, 2012: 1) Such questions especially set in such parameters go beyond bread and butter discussions related to innovative pedagogy, teaching strategy or the role of instructional technology in teaching and learning. They address much wider concerns and visions, which operate at the level of the institution as a whole. Concerns already mentioned by Maha Bali in her essay and eloquently addressed recently by a pioneering article by Michelle Deardorff and Angela Mae Kupenda, entitled Negotiating Social Mobilization and Critical Citizenship: Institutions at a Crossroad (2011).

Deardorff and Kupenda push the debate well beyond the confines of technical issues such as how we teach and behave in the classroom in a moment of crisis or how to make up for class disruption by using “blended learning”. Important and vital as these issues are for the sustainability of the academic program they fail to address the key question posed by the two authors for institutions that continuously face and have to deal with societal crises and transformation. The inspiration for the two authors to locate their discussion “outside the box” of conventional teaching and learning debates originates well before they wrote their article. As I already noted in a previous essay, entitled Educating Citizens: Preparing AUC Students for the new Egypt (2011) the Carnegie Foundation for the Advancement of Teaching, raised the alarm bells very early in the new millennium (2002) when they highlighted their grave concerns over the moral and civic character of Americans in the 21st century which they saw as being central to democracy’s future.

Their engagement with this issue and extensive research concluded that institutions of higher education have a major and primary role to play in addressing these concerns. Several years later and given that academia did not respond in a constructive way the US Department of Education commissioned in 2010 the American Association of Colleges and Universities (AACU) to produce a report on the state of civic learning and democratic engagement in the country and prepare a road map for the future. In a meeting of the AACU in early January 2012 they released the report, entitled A Crucible Moment: College Learning and Democracy’s Future. (AACU, 2012). The report “makes the case for an elevated level of civic knowledge and democratic engagement among
college students”. (Basu, 2012: 1). The significance attributed to this issue in the USA can be glimpsed by the fact that “the U.S. Secretary of Education Arne Duncan and U.S. Under Secretary of Education Martha Kanter will join other Obama administration officials and higher education luminaries at the White House today [January 10, 2012] to make the case that an engaged citizenry will bolster the country’s democracy and economy” (Basu, 2012:1). It is within such a background and context that the Deardorff and Kupenda wrote their seminal article. In it

the authors juxtapose two seemingly inconsistent struggles faced by institutions of higher education – improving the socioeconomic possibilities of our students versus preparing students for what they theorize as “Critical Citizenship.”: “Preparing students to prosper in the present structure, while it may help them to individually succeed, is in a way teaching them to become participants in structures of continued oppression of others. (Deardorff and Kupenda, 2011:339)

The message for us at AUC is crystal clear. As I have already argued in my previous 2011 essay, and seconded by Maha Bali in her essay, experiential learning in the form of Community-Based Learning as a teaching method is a key component contributing to the development of responsible citizens at AUC and thus contributing to the current severe crises facing Egypt. There is an urgency to do so as the country needs institutions such as AUC which educates the elite to play a leading role. In some respects Egypt needs such a contribution from its Universities even more so than the USA. To do so, of course, will require a considerable effort at ALL levels of the institution for it to be accomplished. CLT can facilitate and help and support faculty to do so, but the decision to implement or even pilot courses with a CBL component has to be taken at other levels of the academy: departments, schools, senate, provost and president’s office. Not to take such concerns on board is not just to fail our students, but also the society that hosts us. Egypt is in dire need for critical citizens and we have the resources and academic qualifications to provide them. In my next essay I will present my own ideas on how we can initiate such a discussion across the institution and in the mean time welcome suggestions and comments.

SOURCES
Educating Citizens: An AUC Priority? – Part 2
Pandeli Glavanis, Director, CBL Program and Associate Director, CLT

In part 1, I argued that educating citizens and especially critical citizenship has to become an AUC priority and this must be discussed and debated at all levels of the Institution. In part 2, I propose to present some specific suggestions that may facilitate such a discussion and in particular address the way in which such concerns can be embedded in the curriculum through Community-Based Learning. I start with a couple of critical points noted by the Association of American Colleges and Universities 2012 report, referred to in part 1, which highlights the fact that what is needed is not traditional civic classes as such, but the need for students

...to understand the cultural and global contexts in which democracy is both deeply valued and deeply contested. Moreover, the competencies basic to democracy cannot be learned only by studying books; democratic knowledge and capabilities are honed through hands-on, face-to-face, active engagement in the midst of different perspectives about how to address common problems that affect the well-being of the nation and the world. Civic learning that includes knowledge, skills, values and the capacity to work with others on civic and societal challenges can help increase the number of informed, thoughtful, and public-minded citizens. Civic learning should prepare students with knowledge and for action in our communities. (AACU, 2012:1)

Thus, the report becomes an advocate of what in pedagogical terms we refer to as Community-Based Learning. The report also recognizes that such an academic endeavor also contributes to the development of other generic skills among students which in turn enhance critical citizenship. For example, it highlights the following skills:

- Critical inquiry, analysis and reasoning capacities;
- Quantitative reasoning;
- Gathering and evaluating multiple sources of evidence;
- Seeking, engaging, and being informed by multiple perspectives;
- Written, oral and multi-media communication;
- Deliberation and bridge-building across differences;
- Collaborative decision-making skills;
- Open-mindedness and capacity to engage different points of view and cultures;
- Civic problem-solving skills and experience;
- Civility, ethical integrity, and mutual respect;
- Integration of knowledge, skills, and examined values to inform action taken in concert with other people;
- Public problem solving with diverse partners; and
- Compromise, civility and mutual respect. (AACU, 2012: 3)

The skills highlighted by the report are fundamental to Community-Based Learning, but can also be integrated in a variety of courses across the curriculum. To do so does not only
enhance critical citizenship but also high quality scholarship and academic vigor. Thus, it is impossible to think that any professional academic would not agree to incorporate such skills in their respective courses. Albeit, this may require some fine tuning of a syllabus in order to incorporate such skills in the learning outcomes and to identify appropriate methods to evaluate them. For example, “written, oral and multimedia communication” can swiftly be integrated by expecting students to make oral presentations and produce multimedia assignments alongside the conventional essays and/or exam question answers. Admittedly this presupposes a move away from “multiple-choice” examinations, but the learning rewards for students are too significant to be ignored.

Furthermore, the report also highlights the results from a major study conducted in the USA in 2009, which notes that the percentage of college students who “strongly agree” that contributing to the community should be a major focus of college is significantly higher than those that admit that it actually is. (AACU, 2012: 5)

The table above suggests that students are keen on Community-Based Learning, but academics tend to shy away from it in favor of conventional theoretical and conceptual teaching and assessment. Furthermore, the drop in percentages from 45% in First Year to 38% in Senior Year of what is actually done also indicates that faculty in senior courses tend to emphasize even more conventional scholarship and learning strategies in order to produce first rate scholars to the detriment of critical citizens. Thus, in conclusion let me agree with Deardorff and Kupanda (2012: 345-46), who highlight the fact that the ultimate goal of education is to produce “a more just society” by reminding us of education theory ranging from John Locke’s comments in Two Treatises of Government to Paulo Freire’s Pedagogy of the Oppressed. Democracies need active, informed and responsible citizens; citizens who are willing and able to take responsibility for themselves and their communities and contribute to the political process. AUC can produce such citizens through Community-Based Learning and contribute to Egypt’s struggle for a democratic future.

Sources

Educating Citizens: Preparing AUC Students for the New Egypt

Dr. Pandeli Glavanis, Associate Director, CLT

A classic and honourable tradition of American educational and political thought is the manner in which it endeavours to combine intellectual and moral virtues and in particular the integration of civic responsibility into the classic academic objectives of higher education. This has also been reflected in the century-long mission of the Carnegie Foundation for the Advancement of Teaching and constitutes the key focus of a nation-wide project carried out by the Foundation at the turn of the century. Preoccupied by the nature of the moral and civic character of Americans in the 21st century, which the Foundation saw as being central to democracy’s future in the USA, they commissioned a project whose key research questions were: “How can higher education contribute to developing these qualities in sustained and effective ways? What problems do institutions face when they seriously and intentionally undertake moral and civic education? What strategies do they employ to overcome them?” (Colby et al, 2003: ix) As such the results of the project which were published in 2003 in a book entitled, Educating Citizens: Preparing America’s Undergraduates for Lives of Moral and Civic Responsibility, are most pertinent to AUC at this key juncture of modern Egyptian history 22.

A key conclusion reached by the authors is “that higher education has a critical role to play in shaping character and a sense of social responsibility in the U.S. citizenry because such a large share of the population attends college for at least some period of time” (Colby, et al, 2003: xii). It is for this reason that the authors argue forcefully that “if it is to be most effective, moral and civic learning should be integrated into both curricular and extracurricular programs and that it does not require a trade-off with more narrowly academic goals” (Colby, et al, 2003: xii-xiii). Of course neither of these two conclusions are new or revolutionary. A brief examination of higher education will highlight immediately that the concern with moral and civic education for college students has been around for some time and especially in liberal arts colleges. Nevertheless, recent concerns with achieving higher standards of professional education and preparing students for the global market have pushed moral and civic education to the margin even in colleges which espouse a liberal education mission. Let me elaborate.

Liberal education has been forced to adapt and develop in order to meet the emerging challenges of globalisation, competitive labour markets, new skill requirements and major technological innovations. Many of these challenges have made the classical goals of moral and civic values harder to achieve within the curriculum. In some respects, the changing nature of the higher education landscape presents some serious impediments to maintaining moral and civic education alongside professional academic objectives. For example, the strong departmental focus in most colleges, faculty reward systems that privilege research over teaching, the excessively technical (disciplinary) structures of many curricula with built-in disciplinary requirements and of course the forced accommodation to market forces which

22 Throughout this essay “moral and civic education” are used in the broad sense of their implied meaning and not in the strict sense of pertaining to service learning as such.
have resulted in a higher degree of commodification of higher education (Colby, et.al., 203: 25). These resulting changes experienced by higher education had profound effects on moral and civic education. Given the increased disciplinary specialisation of departments many colleges introduced core curricula which all students were expected to take and thus it was hoped sustain moral and civic education. Nevertheless, this segregation of moral and civic education to the margin of disciplinary–based departments failed to achieve its objectives. Required Western civilization and great books courses lost popularity and students only attended them pro forma. Furthermore, most colleges found it difficult to staff such courses as increased disciplinary and specialized research priorities, given the reward systems prevailing, prevented faculty from devoting appropriate time and effort to such core curricula courses. Colleges then turned to extracurricular activities as a way of fulfilling their stated mission goals of providing moral and civic education. The effect was to marginalize moral and civic education even further and move it out of the classroom altogether.

The developments highlighted above paint a dark landscape within which moral and civic education has been pushed to the margin at a time when democratic endeavours require citizens to be even more aware and active. Nevertheless, there are also certain new developments that provide positive contributions to the overall concern with the sustainability of moral and civic education. During the last few decades the wide recognition that conventional pedagogy of lectures and class-room discussion are inadequate has led to the emergence of new inter-active and dynamic pedagogies on the landscape of higher education. As the authors note, “despite the relative lack of institutional rewards for teaching innovation, faculty from all kinds of institutions have been developing teaching strategies that engage students actively in their own learning and provide experiences with complex capacities that go well beyond absorption of new information. These strategies include project-based and problem-based learning, collaborative learning, service learning and other forms of experiential learning” (Colby, et.al. 2003: 45). These new pedagogies, of course contribute to students gaining a part of a holistic approach intellectual as well as moral and civic education within their own disciplinary-based departments. As such the process of reintegrating moral and civic learning at the core of the new discipline-based curricula in higher education has started to gain momentum.

The significance of experiential learning for moral and civic education derives from the very fact that democracies require citizens who are educated in order to be able to take on the complexities of modern life and resolve complex issues based on actual knowledge and not be guided by elites in power. “Conventional modes of instruction, especially listening to lectures and reading textbooks, are especially vulnerable to producing fragile and superficial understanding. As a result students forget much of what they have learned, are unable to use in a new context what they do remember, and retain fundamental misconceptions that are inconsistent with what they seemed to have learned...Lecture courses often do not support deep and enduring understandings of ideas and are even less suited to developing the range of problem-solving, communication and interpersonal skills towards which moral and civic education (an liberal education more generally) aspire (Colby, et.al., 2003: 133). Extracurricular activities do, of course, also make a contribution to moral and civic education, but it must be noted that not all students engage in such activities and not all that do engage necessarily gain. On the other hand the academic curriculum “is central to educating college students as citizens because so many key dimensions of moral and civic maturity are fundamentally cognitive or intellectual – rooted in
understanding, interpretation and judgement. In fact, by drawing on a wide range of pedagogies, academic coursework can support not only the most clearly intellectual dimensions of moral and civic development but the full range of capacities and inclinations that make up moral and civic understanding, skills, motivation, and ultimately, action” (Colby, et.al. 2003: 168)

It goes without saying that a dynamic curriculum which makes use of the new interactive pedagogies noted above also requires considerable investment of effort and time by faculty. Nevertheless, given the urgency to educate citizens it is incumbent upon educational leaders to grasp the challenge and provide such faculty with the support needed. In particular, educational leaders need to re-evaluate traditional faculty roles and recognize, assess, and reward the considerable intellectual effort involved in curriculum and pedagogic reform. The Carnegie Foundation for the Advancement of Teaching has led the way in this direction, and AUC can benefit greatly by following its advice and recommendations with regard to the introduction of new pedagogies and the recognition of faculty efforts in this direction.

Sources
To Read, or Not to Read … But That's Not the Question!

Maha Bali, Center for Learning and Teaching

I often hear faculty members complaining that students don’t “do” the assigned readings and students complaining of the length, quantity and difficulty of readings assigned to them. Even more often, I hear people talking about how Egypt is an oral culture and how rare it is to find young people who read for pleasure.

But here is the question: is our objective in assigning the readings only to teach our students the skill of reading 200 pages of academic articles in one week? Or is our real objective to have them engage with the text, understand those readings deeply, reflect on them, apply them to various authentic contexts, evaluate the arguments in the readings, and synthesize the various readings with their own life experiences to transform them? It is said that this generation of learners are so digital they are incapable of deep reading (Wolf and Barzillai 2009), but is this not using a deficit model of education, placing the blame on the students’ capabilities?

I have heard students complain about readings assigned to them in courses so often that I have started to consider the legitimacy of their complaints – especially when these complaints come from bright and energetic students whose complaints cannot be attributed to laziness. I’ve spent more time studying education and other teachers than I have spent actually teaching, so every teaching experience for me is a study in trying to apply what I’ve learned from others before me and then to create new knowledge that works for my own context.

I would like to propose a different perspective on the matter of “how do I get students to read?” – I propose we ask ourselves, as teachers, how we might think differently about assigned readings in the first place. When I assign a reading, I ask myself the following questions:

FIRST: Are the readings within the linguistic ability of my students? When the SCI 120 course was first redesigned, feedback from students at the end of every semester included complaints about the difficulty and length of the assigned readings. While I can understand teachers aspiring to having students read seminal works of science, such aspirations are not likely to benefit anyone if the students’ language abilities do not allow them to understand the readings in the first place. As a large proportion of SCI 120 students are freshmen, their language abilities are often not high enough for the assigned readings. The SCI 120 instructors have since modified the readings to a more accessible level for the students and the complaints have dwindled. I suggest we have everything to gain and nothing to lose by trying to find readings within the language abilities of our students, instead of risking frustrating them and ourselves. After all, we do want them to read, and hopefully understand the assigned articles, don't we?

SECOND: Are the readings within the comprehension level of your students? Here I am speaking of something beyond language ability. For example, I once taught a group of
students (half of whom taught English Language or Literature in their school) who could not understand the sarcasm and rhetoric used in short British newspaper articles. Since I was not trying to teach British journalistic writing style, but rather, the ethics of educational technology, I stopped using such readings and stuck to more straightforward readings. I have also seen graduate students complain of readings that include a large amount of new terminology and concepts they had not encountered previously, either in the same course or in a prerequisite course. They complain that they spend so much time researching the concepts that they have little time to complete the assigned reading itself! I suggest that we should not assume students have certain background knowledge of concepts/jargon unless we have good reason to assume so (e.g. because of prerequisites), and we should find ways to support students in understanding the new jargon before we assign them the reading. That way, they can focus on the point of the article, rather than getting distracted trying to understand the jargon.

THIRD: Are we giving students enough time to reflect on the readings? I always felt that the way the Core Seminar 200 was taught (back when I was a student in the late 1990s) was problematic in this aspect. We read a new book each week, attended a general lecture on it, had one class discussion on it, and then moved on to the next book that was only loosely connected by a similar theme. We had little time to reflect on any one book and its depth and meanings, and we had little time to make connections between books, except during exams! I have always wondered how overloading students with pages and pages of reading that they can barely finish between one class and another can give them time to reflect on each reading. Yes, as academics we are capable of reading much more in much less time than our students, and yes, it is a good skill to develop, but are we asking for too much too soon? Are we taking our students through the reading gradually, or are we teaching them fast reading strategies but not reflective, analytical reading strategies? Are we taking the time during our classes and in our written assignments to help them reflect on the reading we have given them, or have we assigned so much reading that there is not enough time in class to discuss it all in depth? If so, then why have we assigned all that reading?

FOURTH: Are the readings relevant to the course and to the students? Students sometimes complain that they cannot see a connection between some of the readings they are assigned and the course. It may be that the instructor sees that connection but has not made it explicit to the students or has not helped them find that connection. It may be that the connection to the course is there, but students do not feel it relates to their own lives. For example, students often question the connection between the content of core curriculum courses and their own major/life. They often question the connection between theory developed in the West and their reality here in Egypt. We often dismiss these objections and attitudes, whereas I believe they are worth serious consideration and can often be addressed when we do take them seriously.

FIFTH: What are we going to do with the reading? I always felt that the best way to know my students have benefited from the reading is when I see them using it, applying it critically in their end-of-semester projects/papers, and better still, if they go back to their own context outside the course and use the ideas they have gleaned from the reading. It means to me that
there was something useful in that paper that they understood and found relevant and may continue to retain.

Basically, I am proposing that we do not ask ourselves how to motivate our students to read what we have decided in advance is valuable for them to read, but rather, that we think about the readings, choosing them after considering who our students are and what they need, in such a way that will result in motivated students who want to do these readings to learn. I propose we do not start by thinking: "what should my students read?" but rather "why should my students read this or that?". Instead of deciding "how much should my students read per class?" we would decide "how much of this reading will students be able to apply and retain?".

I welcome your thoughts on the matter.

References
Richard Byford\textsuperscript{23} Responds to... “To Read, or Not to Read ... But That’s Not the Question!”

I am writing in response to Maha’s\textsuperscript{24} article in \textit{New Chalk Talk} about the problems we have in persuading students to read. Firstly, I would like to thank Maha very much for a very stimulating and thought-provoking article, and I’ve jotted down a few responses below.

I must admit I was surprised that we need to tread carefully when assigning students readings. It may well be true on the one hand, that students do have some difficulty with some readings, but having said that I’ve always believed that reading was at the heart of a university education; and educators and students should know this which is why they are here. As a result, it’s hardly a debatable issue?

My own feelings about reading are as follows: Firstly, it is a usual question in Britain to ask a student at university what they are \textit{reading} in order to find out their chosen subject. X could be reading physics at Cambridge, for example. The use of such a verb does suggest that reading is at the heart of a university education.

Secondly, I read English literature for my first degree. I love reading which is why I chose literature. I will admit I am biased towards reading. Biases aside, I am puzzled as to what courses don’t require a modicum of reading.

I read literature true, which involved reading the primary sources of novels and poetry, and reading secondary sources by academics who were commenting on the primary sources.

I studied history as an ‘A’ level. Not only did this involve looking at the various historical arguments presented in the text books, but we also looked at primary sources and learnt a little about historiography.

I studied economics at ‘A’ level, reading texts written by economists presenting various economical theories.

I have a master’s degree in linguistics, and I was required to read many textbooks and articles about the way language functions.

I’ve studied art history, looking at paintings and sculptures, and reading the texts on what the art historians have said.

I’ve studied classical Arabic and Egyptian hieroglyphs. I read the required grammars and translated the target texts having first read them.

I’ve taught religion. We looked at the primary religious sources, and then what the experts have said in the secondary sources.

\textsuperscript{23} Richard Byford, Senior Instructor, Department of Composition and Rhetoric
\textsuperscript{24} Maha Bali, Senior Manager, Pedagogy & Assessment, Center for Learning and Teaching
My flat mate at university was studying law. Not only did he have to become au fait with the law, but also with the way it was to be interpreted. His textbooks were huge and expensive. I could go on. It’s true the above are essentially humanities and social science subjects, but all require a great deal of reading. Perhaps the sciences don’t require any reading? I think any number of questions can be raised some of which I have listed:

I would like to know what is meant by “reading.” It quite obviously needs to be defined. Does the act of “reading” differ from discipline to discipline? If so, then how.

What do we read? If nothing else I would suggest tentatively, for a start, we read written text, symbols, including musical and mathematical, and images, if nothing else.

How else do students learn if they don’t read? It’s true that they may attend lectures and seminars given by professors and instructors, but doesn’t the professor or instructor impart knowledge logically and sequentially either using verbal or symbolic language? The professor is still transmitting text, and the student must take note of it.

Doesn’t the professor also recommend the seminal works in a given field and direct the student’s attention to them? Doesn’t the professor attempt to communicate, explicate or explain such texts if they are a little difficult?

Some may say that rather than reading, the students use the computer. How though do students gain knowledge from the computer if they don’t read it? Our job, where the computer is concerned, is to ensure that students are using the seminal texts that have been to date uploaded. We want them to discriminate between the good texts and the dross.

It must also be said that at least in the literary and language affiliated departments various strategies for critiquing and explicating texts have been developed, and the last half century has seen a profusion of such approaches, so why is “reading” still so problematic? English is not the native tongue of most of the students so reading is difficult. I admire the students for studying in a foreign language, and it is true that reading can present some difficulties. Yet ditto above, and those who are practitioners in Teaching English as a Second Language for Academic Purposes have developed various strategies for overcoming this. I myself have explored this area.

A good deal of content is culturally specific and not particularly relevant to the Egyptian student. That may well be the case. I’ve never read Thomas Mann, and probably never will; however, I do realize that he is an important writer; and I think that “global citizens” should be able at least to recognize that there are seminal works produced by all cultures that do have relevance to all humanity. Conversely, if too much knowledge is too “American” or “Western” then there are plenty of students in other countries learning Arabic and Middle Eastern affairs. It’s important to learn about other cultures.

British newspapers were seen as problematic for being too culturally specific for the student, yet British journalists are constantly drawing upon the linguistic resources of Shakespeare,
Jane Austen and other great works which are taught in ECLT. Many of us enjoy studying foreign language and literature, be it French, Russian, Arabic, Russian, Latin, Japanese, etc., precisely because we enjoy attempting to learn the nuances of another language. We are also constantly using the semantic and syntactic resources of other languages to enrich or diversify our own.

Students live today in a “Twitter” culture. Maybe, but linguistic registers change according to the context of situation. As academics we are developing the students’ use of formal academic registers in order to help them communicate certain types of information in professional, vocational or academic contexts.

Again, I could continue. There’s so much to say, and to debate. Once again, thanks to Maha.
GradeMark: Socio-Technical Change in Mediated Writing Assessment Tools

A Call for Critical Review

Doris Jones

Writing Instructor, Department of Rhetoric and Composition

A new academic year can present opportunities for faculty to investigate and implement electronic teaching and learning resources that may assist with one of the most time consuming aspects of instruction – assessment of our students’ written work. In Rhetoric and Composition and in other disciplines, formative assessment tools are frequently used since our students are engaged in the “complex performance of writing” (Kalantzis et al., 2011) which is an integrative process involving the presentation of arguments, reasons, evidence, and consultation with theories for research purposes. This “complex performance” also means our students are producing written products across a variety of subject areas that requires working in “communities of practice” or “discourse communities” (Lave et al., 1991) to achieve higher order thinking skills (Etkina et al., 2005). A technological-mediated assessment tool capable of canvassing such an academically rich environment is yet to evolve. Turnitin.com’s GradeMark, PeerMark and WriteCheck are some of the digitized tools that have become prominent fixtures in higher education. As these mechanized teaching resources proliferate, we must consider critically to what extent are they improving the assessment process while also fostering an environment in which our students are learning. Emphasis should be placed on the type and quality of feedback students receive for their written work. Accordingly, in what ways can digitized writing assessment tools provide clear learning objectives while also interpreting student performance? Are digitized assessment tools presenting false expectations for instructors and students? These are valid concerns that appeal to various stakeholders. In this increasingly digitized environment, many instructors have moved away from paper and pen assessment, but where are we going? As educators it is our responsibility to investigate assumptions about digitally mediated writing assessment technologies to determine what these resources can actually do to promote learning and critical reflection.

This fall, I became reacquainted with GradeMark, a Turnitin.com application that has removed the drudgery of downloading and saving papers as MS Word files to my computer’s hard drive. GradeMark’s digital environment allows instructors to access a student’s paper as well as comment and assign grades in one location. Some of the other highlights of this electronic assessment tool include:

- Ample space to write general comments about the student’s paper.
- A rubric feature, a very nice addition for faculty who opt for such a document to accompany the first draft comments or final graded paper;
- Consistent use of relevant terms when common errors occur;
- A digital work environment our students are already familiar and comfortable with;
• Help with identifying issues in language, grammar and punctuation through accumulated reports

The General Comments shown in the graphic below were designed to help the student recognize how argumentative writing involves the integration of support to advance claims. Understanding how students conceive writing as a process can also help determine when and how writing knowledge transfer occurs in academic contexts (Lave et al, 1991) legitimates writing assessment as core teaching and learning objectives.

Figure 1. GradeMark Assignment and Formative General Comments

As a rule, writing assessment must be reliable and valid to guide students to critical reflection. Reflection is viewed as a higher-order, meta-cognitive skill our students must become familiar with. Once these skills are acquired, however they must be assessed. In her text, Reflection in the writing classroom, Kathleen Yancey (1998) defines three types of writing reflections:

1. reflection-in-action, the process of reviewing and projecting and revising, which takes place within a composing event, and the associated texts;
2. constructive reflection, the process of developing a cumulative, multi-selved, multi-voiced identity, which takes place between and among composing events, and the associated texts and,
3. reflection-in presentation, the process of articulating the relationships between and among the multiple variable of writing and the writer in a specific context for a specific audience, and the associated texts.

Yancey is an advocate for instructional methods that encourage students to take ownership of their texts. She claims that instructors have often conscripted the text of their students in
an attempt to pass “judgment” or to assess them. With these points in mind, instructors must design assignments that best conveys GradeMark’s pedagogical potential. As Turnitin.com and its related applications become more ubiquitous and preferably less punitive, we must encourage our students to see themselves as active stakeholders who can validate our use of these assessment tools since transparency and accountability remain prominent issues in higher education.

References


Visual Thinking in the Classroom (I)
Images as metaphors
Aziza Ellozy, Director, Center for Learning and Teaching

I have just returned from the 2011 annual meeting of the Professional Organizational and Development Network (POD) in Atlanta, where in addition to giving a presentation, I had the privilege of attending several faculty development sessions. One presentation in particular attracted my attention, “Everyone’s a visual learner: using visual thinking in the classroom” by Derek Bruff and Jose Vasquez (Bruff and Vasquez, 2011). In a very engaging and interactive session, they made the case for visual thinking and shared all types of visualization tools that could be used for student activities and classroom presentations. I would not do it justice if I were to try and describe the session in this newsletter, but if you are interested, you will find the link to the presentation at the end of this short article.

Many of our faculty use the tools that Dr. Bruff and Dr. Vasquez mentioned in the presentation, including timelines, concept maps, mind maps and graphics. Others make use of data visualization tools in order to make sense of very large and complex data sets in statistical analysis or in the analysis of non-numerical data such as text.

A few of weeks ago, I was pleasantly surprised to see our estimable Dr. Ali Hadi, an expert in data mining and visualization, sitting among the participants in the CLT’s workshop on concept maps. In response to the question I posed to all participants, “what is your interest in this workshop”, he answered, “I am interested in anything that has to do with

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25 Derek Bruff, Assistant Director, Center for Teaching, Senior Lecturer, Department of Mathematics, Vanderbilt University. Reprinted with permission
visualization.” This prompted me to think that visual thinking is a subject matter worth sharing with our faculty at large through the venue of this newsletter. Hence this is the first in a series of articles that will explore the potential of integrating visual thinking in teaching and learning.

As someone who uses quite a bit of images in my presentations, I was inspired by the use of “images as metaphors” in Dr. Bruff and Dr. Vasquez’ presentation and thought it would be a good start to this series. Searching the Internet, I came across Dr. Bruff’s “Eight Lecturing Basics,” which I thought would be a perfect example of a PowerPoint presentation that uses images as metaphors (reprinted here with his permission). Presentations very often suffer from information overload, and the message here is “simplify and amplify” as the brain takes time to process information.

Visual metaphors are nothing new and have been widely used for rhetorical purposes. They are heavily utilized in advertising, where the power of images, whether they are on their own or accompanied by words, is used to persuade. Sankey (2002) and others suggest that the opportunity to facilitate higher learning by using images as metaphor should not be ignored.

Because metaphors depend on higher cognitive skills that make use of the ability to categorize and to make analogies, asking students to come up with their own metaphors or to interpret somebody else’s forces them to draw upon their creative and critical thinking skills simultaneously. In addition, images can be used to illustrate subjective or abstract concepts to arouse emotion. According to cognitive scientist D. Willingham, an added bonus is the effect visual metaphors have on memory: “things that create an emotional reaction will be better remembered” (Willingham, 2009).
On a different note, the participants in the aforementioned POD presentation were given a very useful link to a search engine for images. This search engine has the added option of narrowing search results to images that have a “Creative Commons” license, so that you do not need to worry about violating copyright. For those of us who had our computers with us, we were asked to think of a concept that our students find difficult to understand and to type it in the search field. I typed in “falsifiability,” a concept that students in my class, “Scientific Thinking,” have a hard time grasping, and it turned up the image of a black swan – a great springboard to engage students in a discussion. But the most interesting image came to my neighbor who had typed in “iambic pentameter.” I don’t think I will ever forget what an iambic pentameter is after I saw the image that came up.

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Recent research shows that visual arguments understood in less than thirty seconds persuade more effectively than lengthy reports detailing evidence that refutes commonly accepted claims. What does this mean? We need to teach visual argument. This does not displace the need for research papers or encourage cut-and-paste graphics to substitute for critical thinking skills. Visual arguments can help question or undo assumptions, strip claims down to evidence and change the way we deal with the tendency to affirm existing views in the research process. Brendan Ryhan and Jason Riefer published a study last year in Political Behavior on self-affirmation and its effect on readers’ assessment of news reports. Predictably, readers are more likely to accept news stories that line-up with personal opinion. But the same strategy can also be used to correct misperceptions by keeping the affirmative (rather than oppositional) stance, and delivering arguments that can be digested quickly with clearly presented data that refutes perceived facts.

Given the concerns expressed in earlier Chalk Talks and public forums about how little students read, this may seem to affirm the very habits we want to undo in our courses. However, the backend documents that support visual arguments require extended research and careful assessment of purpose, context, and content in order to produce the graphic in the first place. And peers are more likely to engage and question data-inferences presented graphically. For instance, a playful map of the world called “Because Every Country is Good at Something,” features nations that take first place in a variety of undesirable social trends. Egypt is number one in convictions and the United States takes the gold for the number of serial killers. In the spring I presented this graphic to my Writing Revolution course as we embarked on a media analysis project. It quickly led to debates about method, data sources, and the history of “serial killer” as a category of violent crime. Through hyperlinks, we evaluated the spreadsheet supporting these claims, the database that collects statistics on nations, and the implications of such information as a frame for understanding other kinds of news stories.

But is this limited to media? Arguably, programs that analyze online content proliferate faster and with more updates than analyses of offline reports. Though increasingly we can find text analysis and visualization programs that handle uploaded documents from Word and PDF files, Survey Monkey data and spreadsheets. The goal of such programs is to shift the scale of analysis for literary texts and develop theory from qualitative research while preserving the hermeneutic methods that differentiate humanistic disciplines from math and hard sciences.

28 Informationisbeautiful.com hosts original and “best of” infographics with data links.
29 For example: Atlas.TI, Nvivo, HYPEResearch, CATMA, Dedoose, and Google N-Grams.
However, we shouldn’t limit ourselves to programs designed to code and visualize specific kinds of data. Why not encourage our students to develop new ways to translate lengthy research-based arguments into more condensed claims? In my Writing and Cognition class, students are challenged to convey an “Epiphany on a Page” in their final assignment. The project requires the writer/designer to give the reader key terms, critical arguments, historical developments, and implications in response to compelling questions about what forms of thinking are managed through the creation and transformation of symbols?

No one in the class is a graphic designer and we all have sympathy for the challenge, but repeatedly, with a white board and a pen, we’ve generated visual arguments that are compelling, comprehensible, and provocative for discussion. How? We already do it. Taking a cue from student notes and typical white board use, I’ve noticed how arrows, lines, circles and capitalization reposition the meaning of keywords to condense class lectures and capture the volley of Q&A between peers. If an arrow is a verb, what kinds of causal arguments do we wind up with? Is it a transcription or a transformation when based on a pre-articulate sense that an important point has been made and merits jotting down? This might sound too simple and inconsistent, but it could be an opportunity. What if we go back to those notes and try to create a legend of symbols, then explain what notes actually say and where they might lead to misunderstanding?

What we say, think, and write is always open to critique, but visual arguments may help put us all on the same side, analyzing them together and discussing alternative explanations. Dialogue defines the purpose and the process of creation is a means to that end. This might mean final work is delivered earlier in the term to turn presentation season into discussion and revision season. We can try it, experiment with such assignments without waiting for mastery, and share our experiences to model what we hope our students will do.

30 http://www.visual-literacy.org/periodic_table/periodic_table.html#
A Seasonal Message to All My Colleagues Preoccupied with How Little Our Students Read

Which New Year Resolution: Enhance Learning by Getting My Student to Read More or Explore How Educational Technologies Can Enhance Learning

Pandeli Glavanis, Associate Director, CLT

Throughout this semester there have been two exchanges in New Chalk Talk, a CLT workshop and a CLT Forum all of which addressed the important issue of reading among our students at AUC. Colleagues have expressed a variety of perspectives with regard to the analysis of the problem as well as different approaches as to how we can resolve it. As it might be expected none of the perspectives or approaches have gained wide support as such and the debate is likely to continue next semester. It is within such a background that I would like to make a personal intervention in the form of suggesting which New Year’s resolution we should select, with particular reference to reading for learning and not as an aesthetic pleasure; the pleasure of reading a great novel or poetry.

Following the debate so far I have emerged with a feeling that although there is a great degree of sincerity and concern underlying what has been written and said we also seem to be circling very close around the conventional paradigm that reading texts is what students should do at university and that reading is the source of learning. Thus, the debate so far has yet to challenge the conventional paradigm, but instead seeks approaches that will enable its survival in what we also recognize is a very new world. A world which has presented us with new challenges in the form of educational technology and one which has been adopted by our students far more than us. In fact it is widely accepted these days that the students are the original inhabitants of this new world and we the faculty tend to be seen as the immigrants. Even when we master the language of technology we are still betrayed by a certain accent that persists. Healthy skepticism about the role of technology in learning is of course very welcome and by no means new. Let me share a couple of examples from a fascinating talk by Martin Bean, Vice Chancellor of the British Open University in September 2009. (http://www.alt.ac.uk/altc) In his talk entitled “A Journey in Innovation” he noted some exemplary innovative skepticism from the field of education in the USA. Let me elaborate.

*Students today can’t prepare bark to calculate their problems. They depend on their slates which are more expensive. What will they do when the slate is dropped and it breaks? They will be unable to write.* (Teachers Conference, 1703)

*Students today depend on paper too much. They don’t know how to write without getting chalk dust all over themselves. They can’t clean a slate properly. What will they do when they run out of paper?* ( Principals Publication, 1815)
Students today depend too much upon ink. They don’t know how to use a pen knife to sharpen a pencil. Pen and ink will never replace the pencil. (National Association of Teachers Journal, 1907)

Students today depend on these expensive fountain pens. They no longer write with a straight pen and nib. We parents must not allow them to wallow in such luxury to the detriment of learning how to cope in the real business world which is not so extravagant. (PTA, 1941)

Ball point pens will be the ruin of education in our country. Students use these devices and throw them away. The American value of thrift and frugality are being discarded. Businesses and banks will never allow such expensive luxuries. (Federal Teachers, 1950)

Skepticism with regard to technology and its value for learning has always existed. Nevertheless, pioneering faculty have found ways to overcome such obstacles for the benefit of education and learners. Once more we face major challenges as educational technology in a variety of forms and applications appears on our desk tops and it is for us to determine how to use it to our common benefit in our institutions.

An absolutely fascinating use of educational technology is that used by Sugat Mitra, Professor of Educational Technology at Newcastle University, UK. In his key note speech at the Association of Learning Technologies Conference in 2010 (see http://www.alt.ac.uk/altc) he presented the results of his research conducted during the last decade which focused on self-learning by poor children using only a computer. Mitra shows in a very convincing argument derived from extensive empirical research in many parts of the world that children can learn complex science and other subjects on their own if they are given a computer and organized in small groups of 4 to 6 to work together. Mitra concludes that the only motivation these children needed was their own intellectual curiosity and the atmosphere of group work that was unhindered by dominant intellectual figures (teachers). The role of Mitra was to provide them with the computer for each group and a question and then leave them alone. When he returned in two months the children had found the answers to the questions as well as the scientific theory behind them.

Mitra explains this phenomenon by noting that what is required for learning to take place is two key elements: information and analysis skills and reading comprehension. His contention is that children and/or young adults can acquire these skills and abilities when working in small groups and with access to a computer and the internet. As to the theoretical foundation of his approach it is derived from physics where he notes that a “self organizing system is one where system structure appears without any intervention from outside the system”. Of course, pedagogy has also made use of such theoretical arguments in different guises such as “learning comes from the inside”, etc. Furthermore, Mitra notes the “emergence phenomenon” in self-organized systems. This he explains as “the appearance of a property not previously observed as a functional characteristic of the system”. Thus, Mitra concludes that “Education is a self-organizing system where learning is an emergent phenomenon”. Therefore, we may conclude that you cannot make it happen. You can facilitate the
environment in which it does happen on its own. Thus, it can be suggested that natural curiosity as the motivator, group work as the social format and access to educational technologies (Internet) may well become the future of pedagogy and learning. By implication when we talk about the sanctity of the curriculum we tend to forget that the curriculum itself is available due to the curiosity of some scientist at a previous epoch; why does the apple fall to the ground led to the theory of gravity. In this approach what Mitra suggests is to challenge the curiosity of young adults and allow them to re-discover the curriculum rather than trying to teach it to them from approved texts. In this sense we will also stop being reactive to technology or at best adaptive to new educational technologies and move on to become generative of new formats for learning with technology. Formats where we become the facilitators who also ask the questions. Asking the right questions that stimulate curiosity and learning replaces providing eloquent answers (in the form of lectures) and extensive reading lists for students to assimilate and memorize. This is the challenge of the future of learning and we should consider it carefully. I also now know which resolution I will select for the new year.
This third newsletter on the theme of “Visual thinking in the classroom” was specifically written for us by Dr Derek Bruff, Director of the Center for Teaching, Vanderbilt University. Dr Bruff is the author of Teaching with Classroom Response Systems: Creating Active Learning Environments (Jossey-Bass, 2009). Make sure to visit his blog (http://derekbruff.org/) for some very creative ideas about using technology for teaching and learning. Of course CLT is available to support you should you want to explore any innovative ideas.

Visual Thinking in the Classroom (3)

Derek Bruff, Director, Center for Teaching, Vanderbilt University

Timelines have long been used to convey chronological information visually, but their potential as teaching tools has expanded with the advent of digital timeline tools. Not only do these tools allow for larger, more detailed, and more interactive timelines, but they also provide mechanisms by which many students can collaborate to create timelines. The screenshot below shows a timeline of the Victorian Age created by students in Jason B. Jones’ English class at Central Connecticut State University.

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31 http://www.cabinetmagazine.org/issues/13/timelines.php
32 http://www.english.ccsu.edu/jones/timeline/victoriantimeline.html
As part of an assignment, each student was asked to identify 12 historically significant events from a particular year between 1832 and 1901. The students entered information about these events in a shared Google Doc spreadsheet, and data from the spreadsheet were automatically imported into the online timeline. Students could then scroll through the timeline, filter the timeline by event type, search for keywords, and click on events in the timeline for additional information. Brian Croxall, then at Clemson University, later modified the code for this timeline tool to include a Google-powered map of all events on the timeline, which he then used in an American literature survey course (Croxall, 2010).

Jones and Croxall asked their students to contribute to their timelines outside of class, but students could be asked to bring their laptops to class and assemble a timeline synchronously during class. Once a timeline is populated, it becomes a useful analysis tool. For instance, one might ask students to write about patterns they observe in the frequency or categories of events on the timeline or to discuss these patterns in class.

Timelines need not be limited to describing historical events. The plots and character arcs of books and movies can be mapped out on timelines. For instance, the online comic strip “xkcd” mapped the character movements in the Lord of the Rings and Star Wars movies. In a more educational context, Georgetown University sociology professor Sarah Stiles had her students use the online tool Prezi to map the development over time of characters in the book Ain’t No Makin’ It: Aspirations and Attainment in a Low-income Neighborhood by Jay McLeod. This assignment helped her students understand individual characters in the book more deeply, while also helping them see connections among the characters’ lives.

Timelines can be about the future, not just the past. For instance, one might ask students to predict the years that (a) humans land on Mars and (b) the so-called “technological singularity” occurs, and then plot those predictions on a timeline of the future. Below is a sketch of what such a prediction timeline might look like, with X’s corresponding to individual student predictions. Students could be asked to analyze the timeline for patterns and use the timeline as the basis for arguments for or against particular predictions.

33 http://jbj.pbworks.com/w/page/13151955/VictorianTimeline
34 http://www.briancroxall.net/timelines/AmericanSurveyTimeline2010.html
35 http://xkcd.com/657/
36 https://blogs.commons.georgetown.edu/blog/archives/723
With timelines, as with many visual thinking tools, spatial arrangements convey meaning. Having students build timelines provides students with an opportunity and framework within which to construct their own meaning of course material. That kind of meaning-making can occur with or without technology, as the prediction timeline example above illustrates. But if you're interested in using technology to create timelines (or to have your students create them), see Brian Croxall’s tutorial\textsuperscript{37} for using Google Docs to create collaborative timelines, as well as the online timeline builders timeglider\textsuperscript{38}, Dipity\textsuperscript{39}, and TimeRime\textsuperscript{40}.

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Why They Do Not Read? A Personal Statement

Pandeli Glavanis, Associate Director, CLT

“Whenever faculty get together to talk about student writing or critical thinking, they inevitably turn also to problems of student reading.” (John Bean, 1996)

“The formulation of the problem is more important than the solution.” Albert Einstein

“The Times they are a-changing” (Bob Dylan, 1964)

CLT has provided the space (in Newsletters, Workshops and Fora) for the debate over student reading to continue since Maha Bali initiated it. It is a debate that I feel passionately about and for this reason I ask for your indulgence to allow me to make a further contribution in the form of a personal statement rather than my professional status as Associate Director of CLT. As I reflected over what has been presented up to now I found myself returning to my undergraduate days at Princeton University and how I achieved learning. What figures centrally in this reflection is the spring semester of 1970 when my learning curve jumped geometrically and I became aware of knowledge that had never appeared on my radar screen before. Let me elaborate.

On Thursday, April 30th, 1970 Nixon invaded Cambodia and the student movement along with many other socio-political organizations responded dynamically. In several campuses there were extensive demonstrations and occupations of administration buildings. On May 4th, 1970 State troopers fired on student demonstrators at Kent State University and left four students dead and nine injured. This added fuel to the fire and in Princeton we occupied Nassau Hall (main administrative building). What followed for the rest of the semester was equivalent, in my mind, to an epistemological break or paradigm shift. The discussions that took place among students and faculty went far beyond the war in south-east Asia and challenged the very process of education and learning at Princeton. We challenged the curriculum, syllabi, teaching strategies, etc. Many faculty joined in these discussions and what emerged introduced major differences in how students would manage their own learning henceforth. Independent Study was introduced as part of the curriculum and students were allowed to design courses and select readings in consultation with faculty.

Black and Gender Studies were initiated and in some departments such as Middle East Studies (in which I was following a minor) the traditional prevailing pedagogy of teaching Arabic was rejected in favor of a more dynamic approach which emphasized spoken colloquial courses. This was seen as anathema to traditional orientalist pedagogy that had rejected the spoken Arabic of the Middle East in favor of what they termed pure classical Arabic with focus on grammar, syntax and written texts only. Changes were also introduced into the history, politics and sociology of the Middle East that challenged traditional orientalist epistemologies. Students across the University took ownership of their learning and introduced interactive and student-centered learning in an academic establishment that had prioritized tradition over active learning. As an alumnus of Princeton I believe these events in the spring of 1970 enhanced teaching and learning at Princeton and contributed to its remarkable position as a major undergraduate college within the Ivy League in the USA. This was also the year when on June 9th, 1970 Bob Dylan was awarded an Honorary...
Doctorate in Music and both Huey Newton and Bobby Seale (founders of the Black Panthers) were invited as guest lecturers. The Princeton of yesterday was challenged, found wanting and transformed by joint student-faculty initiatives. Students and faculty together opened Fitz Randolph Gate which has been locked for decades and it symbolized the unity of the University with the community. The gate is still open and community-based learning is still a major part of the Princeton curriculum.

In some respects, what happened in Egypt on January 25th, 2011 is very similar to what transformed higher education in the USA in the 1970s. Many of us in the older generation groups experienced these transformations and more than likely benefited significantly intellectually and academically. The problem I feel is that we have now forgotten these events and are in danger of becoming the “conventional” stalwarts of the early 1970s that were challenged by students and many faculty. As Bob Dylan notes in his song “The Times they are a-changing” and this applies to every epoch where major socio-political transformations occur.

I am quite confident that most faculty at AUC would agree that the answer to the question “What does it mean to be Literate in the 21st century” will include a variety of new literacies that did not even exist when I was an undergraduate. Thus as a faculty member at AUC I do have to ask myself “What literacies should I be teaching?” Of course all would agree that the basics (reading, writing) need to be taught, but so should the new literacies: critical and visual literacies, understand and read the world as opposed to text, social literacy, how to read people and relationships and outdoor literacy (our environment) to mention but a few.

If we accept the above, then we also have to ask ourselves what is the new role of the faculty and in particular what role does educational technology have in promoting these new literacies. I believe that the answer to the first question is widely accepted and modern pedagogy has underscored the importance of faculty becoming facilitators of learning rather than teachers as such. The conventional lecture-based course has been challenged and found wanting. The answer to the second question, however, is yet to gain wide professional acceptance. This is despite the fact that we do recognize that students are the technology era natives and we the faculty are the immigrants. Our students are bombarded daily by electronic and visual information, but do not necessarily have the skills to interpret, evaluate and use this plethora of data thrown at them. The question that arises, therefore, is “Does literacy need to be redefined?” Clearly in the world in which we live to associate literacy solely with reading texts is to ignore our surrounding environment and fail our students. In the 21st century media literacy will not be a hobby or luxury, it will be a necessity. Our students will shape the 21st century and the tools they will need are multiple literacies including technological and media literacies. I believe it is our duty as educators to both facilitate this new learning and to ensure that they are capable of using it in a critical learning context. To do this we must not only allow them to use it in courses, but in fact we must encourage them to integrate it in a sound pedagogic way into their learning. Leading pedagogist Dr Joan Lippincott has emphasized this in her pioneering work on “convergence of literacies” and so have many other pioneers in modern pedagogy. CLT, of course has pioneered such issues at AUC and many faculty have already embraced the new challenge in very creative new teaching strategies.

41 Bob Dylan wrote another one of his classic songs that year entitled “Day of the Locusts” with reference to that day when he was awarded the honorary degree. Thus, the class of 1970 adopted the motto “In Locusts Parentis” to the present day!
“Reading is Fundamental” (RIF) was a major campaign slogan in the 1970s for K+12 and in some respects it still is a key teaching strategy in most of higher education. Nevertheless, “a consistent pattern of research findings has established compliance with course reading at 20-30% for any given day and assignment. Faculty face the stark and depressing challenge of facilitating learning when over 70% of the students will not have read assigned course readings.” (Eric Hobson, n.d.) Hobson goes on to demonstrate that “surveys show that students see a weak relationship between course reading and academic success. Student perception and linked behavior collected in the National Survey of Student Engagement (2001) for example, underscores the extent to which students relegate course reading to the margins of necessary activity; most college students reported that they do not read course assignments.” Clearly we are confronted with substantive research evidence that university students are sending a strong message and have been doing so for at least a decade or more. The fundamental question for us as educators is how we propose to shape our classrooms and accordingly transform our teaching strategies. We need to move towards problem-solving not compliance with traditional teaching strategies that prioritize “reading literacy” and away from “one size fits all”.

It is also vital to recognize that this generation is motivated differently with regard to learning and that skills for a successful career, skills for life-long learning and skills for active and informed citizenship have converged. To focus on “reading literacy” alone is to deny our students certain vital skills they will need. Content is, of course, also important and thus we need to explore ways of integrating learning technologies with textbooks and also try to use content to teach such core skills. For the “net generation” that we teach “a bad day is having a slow internet connection”, but it is also a generation “that wants to make a difference”. Similar to Princeton in Spring 1970, post-revolution Egypt has created the space and provides the opportunity for this to happen, it is up to faculty to educate for innovation. To do so is also to take on board the fact that the 21st century survival skills our students need are different. They “need critical thinking and problem-solving, collaboration across networks and leading by influence, agility and adaptability, initiative and entrepreneurialism, effective communication, accessing and analyzing/evaluating information, curiosity and imagination.” (Tom Grant, 2011) Reading or even enhanced reading skills alone will not provide those additional skills. The challenge is there and it is for us as faculty and 21st century educators to seek the solution to the problem together with our students.

N.B. The above issues will be discussed at a CLT workshop entitled “Teaching/Learning Strategies that challenge “Reading is Fundamental”, on Sunday, March 25th from 2 to 3.15 pm. and a CLT Forum entitled “21st Century Dilemmas in Academic Reading”, on Thursday, May 3rd from 1 to 2 pm. Please attend and contribute to this vital debate at AUC.

References
NOTE: In this newsletter and the one that follows, we will be sharing our experience with Digital Narratives as a way to engage students with the process of science. However, these projects are multi-disciplinary by nature and can be used in any discipline. The only limit is our own imagination.

Avraamidou, and Osborne\(^1\) in their paper “The Role of Narrative in Communicating Science” have argued that scientists need to “explore new modes of communicating science” and that by using narratives, science could be made more “meaningful, relevant and accessible to the public”. To support their argument they quote Lemke\(^2\) as saying

“In teaching the content of the science curriculum, and the values that often go with it, science education, sometimes unwittingly, also perpetuates a certain harmful mystique of science. That mystique tends to make science seem dogmatic, authoritarian, impersonal, and even inhuman to many students. It also portrays science as being much more difficult than it is, and scientists as being geniuses that students cannot identify with. It alienates students from science”

After several semesters of teaching “Scientific Thinking” we are still struggling with a similar bias towards science on the part of non-science students. The goals of the Scientific Thinking course are ambitious: as part of their liberal arts education, we want students to know how scientific knowledge is generated and validated, what kinds of questions are asked about nature, what kind of evidence is acceptable, and how hypotheses are tested against experiment and observation. In the process, students learn how test results are evaluated and how to distinguish between good science, junk science and pseudo-science. In short, our goal is to have our students acquire the scientific (critical) thinking skills necessary to make informed decisions on scientific and non-scientific matters as citizens or in their personal lives.

And these are just the objectives of one third of the course. The rest of the course is devoted to the knowledge accumulated about the natural world, with specific emphasis on important theories such as the Big Bang theory, Evolution and DNA etc. To avoid alienating students from material that may seem irrelevant to their everyday life or chosen careers, the material/concepts are designed around seemingly simple questions: “Who are we?” “How did we get here?” “Where are we in this Universe?” (See Canfield’s "Intelligent Redesign: A collaborative Approach to "Scientific Thinking"\(^3\).)

Continuous assessment of the course revealed to us that, although students “understood” these theories and could answer exam questions well, they had no appreciation of the process of science. To Dr Mostafa and me, who are instructors of the course, something...
was missing. We wanted our students to encounter historical figures, to follow the growth and demise of certain scientific theories and most importantly to see how science develops. How could we do this, in parallel with the course material, without assigning a book to read (God forbid) or without adding “content” to a syllabus that is already overloaded with “content”?

The answer to this was through the class project, an important element of the course through which we try to impart some of the 21st century skills (visual literacy, information literacy, technological skills, peer collaboration, effective communication etc) that educators have recognized learners need in order to thrive in a digital world and a digital economy. Having experimented with different multimedia projects in the past we settled in what turned out to be a successful formula.

Taking our cue from such experts as Lippincott (who has argued that we need to prepare our students to be digital authors), and partly inspired by such innovative practices as that of “Born digital” (presented at an Educause conference), we settled on a digital narrative project which we used in conjunction with the collaborative nature of wikis.

So What Is A Digital Narrative? The simplest definition would be that of “story telling that uses digital technologies”. It can take the form of a short movie, a narrated power point presentation, or any other digital medium which could relate an argument, an analysis or an exposition. The topics can range from personal tales to the recounting of historical events, to reflecting on community-based learning experiences etc. The assignment could be made as academically rigorous as any traditional paper, and the level of difficulty would be determined by the individual instructor.

Our class projects consisted of having our students work in groups and create a digital multimedia representation of a text about science and scientific discovery. Specifically the product was to be a 6-7 min video, and the texts chosen were chapters from Bill Bryson’s “A short history of nearly everything”.

Concept maps and storyboards were to be submitted before the production phase and students would then receive feedback. The final products would be uploaded in a class wiki and students were to peer review the other groups’ projects (It was much more engaging for students to watch their peers’ videos than to read the book) In addition, a final individual reflection paper was to be submitted.

At first students were a little overwhelmed: the chapters appeared to have too many details and many new concepts and events most of which they had never encountered before. How could they translate all this in a meaningful video using only images, narration and music? While creating any type of multimedia project (especially for the first time) needs scaffolding, the need was accentuated in this first year course. Hence a detailed timeline and grading rubrics were submitted to students with the various phases of the project outlined. A summary of these phases is outlined above.

**TO BE CONTINUED IN THE NEXT ISSUE**

**Sources:**
Science and the New Landscape of the 21st Century: Role of Universities in Transforming Societies and Shaping Cultures

Dr. Alaa I. Ibrahim, Physics Department

The world of the 21st century will be shaped and led by knowledge-based societies and nations. Globalization has already set the stage for this era through making the world interconnected more than ever and the tools of empowerment accessible to all. This revolution has been driven by breakthroughs in science and technology whose impacts touch every aspect of our lives today. To lead and compete in this era we must embrace a science literate and appreciative culture. Rooted in our heritage from the Ancient Egyptian through the Roman and Arab/Muslim epochs, nurturing this spirit is a proven catalyst to stimulating a knowledge-based society; to fostering innovation and creativity; and to promoting good citizenship and governance, and thus development. But how can we induce this transition from our present reality as a country and region? Societal transformations do not emerge in vacuum. They require a cultural context driven by visionaries and institutions. With a majority of youth among our population (more than any other region in the world), universities and educational institutions are poised to play a pivotal and vital role through realizing their untapped potential in fostering public engagement with science and knowledge while bridging the divide between science on one hand and arts and humanities on the other hand, which will also yield cross-disciplinary collaboration among their faculty and students and true enrichment to the curricula.

As more and more scientific and technological issues – ranging from climate change to renewable energy, from new epidemic outbreaks to natural disasters, and from pioneering biomedical research to the social controversies stirred into debate by new medical practices – appear in the daily news and influence so much of our public discourse locally and across the globe, the need for the scientific and intellectual community to convey highly complicated technical information and their implications to mass audiences grows ever apace. Furthermore, as they attempt to address these issues with the general public, the need to enliven their communications so that they truly resonate with non-specialist audiences becomes ever more urgent.

To achieve this effectively and widely, universities need to launch new initiatives with formal and informal programs. New bridging courses and curricula will need to be introduced to connect Science and other disciplines, including Mass Communication, History, Performing and Visual Arts, among others, so that graduates could be ready to play an effective role. Universities will also need to revamp their community outreach role and activities through offering informal learning programs that genuinely engage the youth and the society at large. In essence, there needs to be a dialogue between the intellectual and scientific community and the society (including civil society organizations). The benefits of such a dialogue are mutual and countless. Because science in the popular native media as well as science museums, nature centers, aquaria, planetaria and the likes are rather scarce in our locale, the need to create informal learning opportunities is indispensible.
Informal learning encompasses a variety of venues and media and offers valuable learning outcomes for people from all walks of life, ages, and socioeconomic backgrounds and abilities. It allows people to explore and pursue their own interests and it provides useful social interactions. While formal learning stops for most people when they finish school or university, informal learning activities encourage people to become lifelong learners. At schools and universities, it enhances and enriches formal learning through leading to further inquiry and enjoyment. Research shows that participation in informal learning activities is linked to academic success and even good public policy.

Beginning April 19 through May, a carnival of activities will come to campus with the Cairo Science Festival [1], held in collaboration with and concurrent to the Cambridge Science Festival (the first annual Science Festival in the U.S., organized by MIT and Harvard). The festival is a public celebration of science and technology in recognition of their key role in our everyday life.
Teaching vs Research: Moving the Debate Forward (Part 1)

Dr Pandeli Glavanis, Associate Director, CLT

The perennial problem of the relationship between teaching and research has persisted in academia for generations, but with some new twists during the last two decades. Traditionally young faculty were mentored in such a way that they clearly recognized the priority attributed to research by institutions and if they sought tenure they knew exactly what they had to do. Nevertheless, recently teaching quality has gained respect and with a variety of accreditation boards and external evaluations faculty now find themselves pressured to devote time and energy to both teaching and research quality output and feel compelled that they must excel in both. The argument has now evolved in a manner that assumes that teaching and research are complimentary and that in some synergistic way each builds on and supports the other. Administrators, in particular, propagate this argument forcefully and most faculty reluctantly accept it as no one wants to be delegated to the teaching-only category in academia. The key question that has yet to be answered, however, is whether faculty who try to excel in both and do manage to integrate their research into the classroom actually enhance student learning as such?

Recent pedagogic research challenges the assumption that there exists some automated and assumed benefit for student learning when faculty do excel in both and do integrate their research into the classroom. For one, Michael Prince, Richard Felder and Rebecca Brent, argue that “integrating research into the classroom in the way integration is normally conceived – i.e. instructors discussing the content of their research – has not been shown to occur frequently or to improve instruction” (2007: 286) In fact, Prince, Felder and Brent argue in this extremely well researched article that the debate itself is misleading and that the two sides are actually debating different propositions. Administrators and proponents of the teaching/research nexus argue that high quality research does have the potential to enhance teaching, while the other side questions whether it has actually done so with regards to student learning as such and if there is pedagogic evidence of it doing so. In other words, the three authors challenge the proposition of whether faculty excellence in research and its integration into teaching is in itself sufficient for student learning to improve. Instead the authors focus on the student research-experience itself as compared to the research excellence of faculty who then integrate their research into the classroom. What they suggest is that inquiry-based approaches and problem-based learning that in fact exemplify the research process itself do enhance student learning. In such circumstances, they argue, “a faculty member’s research provides experiences that have the potential to enrich instruction by introducing students to the research process and to important research skills.” (2007: 285) Let me elaborate.

The three authors start by highlighting the fact that research and teaching have different goals and also require different skills. “The primary goal of research is to advance knowledge, while that of teaching is to develop and enhance abilities.” (2007: 283) Of course they argue that it is possible for faculty to have both sets of attributes and even to excel in both. Nevertheless, it also has to be noted that “first-class teaching and first-class research are each effectively full-time jobs, so that time spent on one actively is generally time taken away from the other. There should consequently be no surprise if studies reveal no significant correlation between faculty research and effective teaching.” (2007: 283-4). The three authors then quote numerous studies and conclude that
“the likelihood that research productivity actually benefits’ teaching is extremely small…the two, for all practical purposes, are essentially unrelated.” (2007: 284)

The authors do acknowledge, of course, that some faculty do excel in both, but are keen to emphasize that these are unique cases of individuals who are able to achieve both the goals of teaching and research. At an institutional level and from the perspective of allocating rewards and merits this is clearly not the case.

Nevertheless, academia is under pressure to enhance both teaching and research. On the one hand, research is what still brings in the prestige and the funds and accordingly plays a central role in promotions and tenure, while the wider community expects significant advances in teaching strategies and enhanced and visible learning outputs for students. Thus, faculty and administrators forced to respond to both sets of pressures assume that the teaching/research nexus is a given and it is only a matter of discovering the appropriate mechanisms by which it can be achieved. In fact, Prince, Felder and Brent suggest that academia seems to be searching for The Holy Grail which it assumes is there but just needs to be found. Their highly referenced article however indisputably concludes that there is no Holy Grail.

At the end of the day, however, academia is still accountable to their students and also seeks to excel in research status and funding. Thus, the teaching/research nexus is upon us irrespective. Prince, Felder and Brent recognize this and thus their suggestion that we need to move beyond the classic debate of finding the Holy Grail and instead find new ways of integrating teaching and research which can be seen to contribute positively to the goals set by academia: excellence in both teaching and research. It is here that the three authors make a critical suggestion which relates to what faculty bring into the classroom in the teaching/research nexus. They argue that what faculty need to focus on is the research process and not the content of their research, for it is the former that enhances learning and knowledge retention. The authors indicate from extensive pedagogic research that attempting to integrate research content into the classroom fails for a variety of reasons including the hierarchy of knowledge and the constraints of curricula which do not allow for new knowledge to be incorporated. The research process and research skills however are doable and there is also pedagogic evidence that it does enhance learning and stimulates undergraduates to pursue graduate studies.

Pedagogic research during the last two decades supports the Prince, Felder and Brent conclusions and highlights the centrality of inductive teaching strategies as the exemplar of enhancing learning for undergraduates. Learning is itself a process and does not derive from neatly pre-packaged syllabi which provide the questions and the answers for undergraduates to then repeat in exam questions. Learning requires solving problems and the skills to solve problems need to be taught. A research-active curriculum (to be discussed in the next issue) is the Holy Grail that we seek and faculty can adapt their teaching strategies to include such an approach. CLT can also help faculty who wish to do so. We can then all move the debate of the teaching/research nexus into a more productive terrain.

Sources:
Teaching vs Research: Moving the Debate Forward (Part 2)

Dr Pandeli Glavanis, Associate Director, CLT

The previous Newsletter concluded that for research to be seen to contribute to higher quality teaching faculty should provide students with a research-active syllabus where they are expected to engage with the very process of carrying out research. It is thus that the research/teaching nexus will enhance quality teaching. Given that extensive pedagogic research confirms the benefits to be derived from such a strategy let us consider the implications of (i) bringing research into the classroom and (ii) involving students in research activities. Thus, the rest of this newsletter will consider each of these activities on its own and draw some conclusions that may be of interest to faculty who are keen to enhance both their teaching and research.

There is considerable pedagogic research (Colbeck, 1998 and Jenkins et al, 1998) that indicates that bringing research into the classroom can benefit students in that it generates enthusiasm for knowledge and adds credibility and institutional reputation, but it also skews the focus of teaching, especially in the “hard” sciences where hierarchical knowledge structures put most research beyond the capability of undergraduates to absorb. Thus, although bringing research into the classroom may be beneficial it has yet to be shown to be so by pedagogic research. It is thus preferable for faculty to introduce students to the research process itself rather than transmit research content as such. Faculty as researchers “routinely confront open-ended and imperfectly defined problems, figure out what they need to know and how to find it out; search out sources of missing information; hypothesize and test possible solutions; arrive at final results; and defend them.” (Prince, Felder and Brent, 2007: 287) This, of course differs dramatically from the traditional lecture-based teaching strategy which relies often upon PowerPoints in order to present findings or research that students are expected to either reproduce in answering examination questions or at best apply to assignments. The research process as outlined above however presents students with an intellectual challenge that they are expected to solve and as such active learning does take place.

The introduction of a research-active syllabus, however requires faculty themselves to be active researchers in their respective field and thus to be able to assist students to engage with the intellectual challenges. Research active faculty are more likely to be familiar with the relevant literature to be considered by the students as well as the research strategies and skills required to respond to such an intellectual challenge. Similarly the faculty’s knowledge of the research environment from their own active research will facilitate the students’ path towards seeking solutions to intellectual problems. Thus, students will also develop critical thinking and problem-solving skills and enhance their knowledge retention as well as their research skills which will certainly benefit them in whatever career they chose to follow. In this respect the teaching/research nexus is enhanced for the benefit of teaching students and the educational benefits far surpass that of just introducing students to research content.
Pedagogic research has recognized the benefits of such an inductive teaching strategy for some time and called upon research-oriented institutions to take advantage of their research profile in order to enhance teaching practice. In fact a major study of education at research universities which was commissioned in 1995 by the Carnegie Foundation for the Advancement of Teaching, and chaired by its President Ernest L. Boyer, concluded that such institutions should move to an inquiry-based approach to teaching. (Prince, Felder and Brent, 2007: 288)

It goes without saying that if such a strategy is adopted across the curriculum in Universities it would also bring about a cultural change which would not only enhance teaching quality for undergraduates but also prepare them to function as citizens and professionals in their future lives. Extensive empirical pedagogic research has shown that such a research-active curriculum is to the benefit of all concerned. It is for us as faculty to take on the challenge and adapt our teaching strategies accordingly.

The adoption of a research-active syllabus may appear daunting for some faculty who have accustomed themselves to the traditional lecture approach in which students are spoon-fed content. Modern pedagogy and instructional technologies, however, have highlighted numerous teaching strategies that enable us to engage with a research-active approach which do not constitute a major burden and which are currently used by many of our colleagues. It is beyond the scope of a short newsletter to discuss them all or for that matter to spell out the strategies in any detail. Faculty who are interested are invited to visit CLT where these strategies can be discussed and support provided for their implementation. Nevertheless, it is appropriate to indicate a few examples in brief.

The first point that needs noting is that a research-active syllabus needs to include four basic elements:

- **research-led:** learning about current research in the discipline;
- **research-oriented:** developing research skills and techniques;
- **research-based:** undertaking research and inquiry;
- **research-tutored:** engaging in research discussions.

In effect this implies re-writing our respective syllabii with the above four elements in mind. In other words, the content that we wish to ensure is delivered can be done by reference to the four elements above. Our reading list, for example should include the basic texts students need as well as electronic data-base sources that enable students to seek additional material which will help them solve intellectual problems given to them as assignments. The library is, of course, more than willing to provide such sources from our extensive electronic holdings and thus minimize the effort for faculty. Similarly, the syllabus should make room for a brief introduction of basic research skills currently used in the discipline and a discussion of new research techniques that may have emerged since some of the textbooks were published. Furthermore, we can make use of the case-study approach, for example, as a means of enhancing inquiry-based teaching while also covering content. Finally, it is appropriate to devote time in the syllabus for research discussion of the projects students are asked to do as part of their assignments.
For faculty actively engaged in research the above elements are but an extension of their active research and will not constitute a burden as such. Thus, our research activity will be integrated into our teaching in a manner that enhances student learning and benefits from our research profile. Thus, the teaching/research nexus can be enhanced across the institution for the benefit of all concerned.

**Sources:**
CLT Faculty Institute, Workshops and Fora: Fall 2010

Grading or Assessing Learning
Our students "worship" the grade! Faculty find grading too subjective and difficult to justify! Employers seek graduates with high GPAs! The list can go on….. Grading has constituted a corner stone of academic assessment for decades. Nevertheless, no single system has gained universal acceptance and both faculty and universities are continuously experimenting with alternatives. Grades often do not provide a clear picture of academic aptitude or of potential for success, and learning, not achieving the highest score, should be the goal of a liberal education. (Wikipedia) This workshop will consider such alternatives and suggest different strategies that focus on student learning.

Facilitator: Pandeli Glavanis, Center for Learning and Teaching

CLT Faculty Development Institute

Revitalizing your classroom: active learning in the classroom
Most students cannot listen effectively to lectures over a sustained period of time no matter how skillful the lecturer. For many university teachers today, the goal is to transform students from passive listeners to active learners. Active learning is a “student-centered” approach where the teacher provides students with opportunities to learn independently and from one another.

During this workshop, participants will become acquainted with some of the strategies used to enhance a lecture with active learning. We will also discuss how technology can enrich and help meet active learning objectives.

Facilitator: Aziza Ellozy, Center for Learning and Teaching

Peer instruction: a way for in-class interactions
In-class interactions promote student engagement during class time, creating a dynamic environment conducive to better learning. Peer instruction, where students teach, and learn from peers, is an effective pedagogical tool for developing active and independent learners. There are numerous methodologies of peer instruction in and out of class. Concept tests present an effective methodology based on student-student in class interactions. This workshop introduces Concept Tests with an example of how to apply them.

Facilitator: Adham Ramadan, Chemistry Department

Debating Across the Curriculum: Preparing AUC Students for Academic Interaction
This workshop will highlight the benefits of using debates to develop critical thinking, general knowledge about current issues and oral expression in academic disciplines.

Presenter will describe case studies and demonstrate a system that faculty members can effectively use to apply debates across disciplines. A list of debate resources will also be included.

Facilitator: Carol Clark, English Language Institute

E-portfolios for assessment and showcasing: an introduction
E-portfolios are powerful tools that can be used for a variety of purposes including selection of student work for program accreditation, student showcases for potential employers or graduate schools, and faculty showcases for promotion and tenure. At AUC, several departments and programs have committed to using student e-portfolios for accreditation and other purposes. This workshop will explore what we mean by e-portfolios, how they are used as assessment tools and how some AUC faculty intend to use them. The focus will be on the Epsilen eportfolio which AUC is piloting.

**Facilitators:** Aziza Ellozy, CLT and Magda Mostafa, Construction Engineering

**Critical Friendship circle**
A Critical Friendship Circle (CFC) is a group of critical friends (classmates) who give mutual feedback on their presentation skills and/or teaching techniques. The purpose of the circle is to formalize the process of feedback via protocols to ensure that the students know what to expect and how to conduct a feedback session so they can play their roles as critics and friends in an appropriate way. This session will present the protocols, show how they are used and provide prompts for students to use when giving feedback.

**Facilitator:** Phyllis Wachob, English Language Institute

**Writing Effective Learning Outcomes**
In this hands-on workshop, participants will gain skill in writing effective student learning outcomes and will be given an overview of techniques for assessing student learning. Participants will take an inventory of their individual teaching goals and will use this information to develop a set of learning outcomes for one of their courses.

**Facilitator:** Ann Boudinot-Amin, Institutional Research Office

**Students as Content Creators: Convergence of Literacies**
Higher Education is acutely cognizant of the importance of the various skills acquired by students in order for them to secure rewarding employment after graduation. These skills include literacy, disciplinary knowledge, communication, IT and several others. Nevertheless, faculty engaged in disciplinary teaching do not have the time or in many cases the expertise to teach them. Joan Lippincott, however, argues that for such skills to be acquired by students they need to be integrated into the curriculum and enable students to acquire them while preparing multi-media content as part of their assignments. This workshop will explore the thesis of students as content creators and consider ways in which it can be implemented at AUC.

**Facilitator:** Pandeli Glavanis, Center for Learning & Teaching

**Sailing through the copyright quagmire: teaching and learning with technology**
When working with technology in a classroom there are important copyright issues that as educators either do not consider or do not know how to address. In this workshop we will approach the issue as practitioners and explore different scenarios that will serve as springboards for discussion. We will discuss how Creative Commons work and share some resources that may serve as guidelines.

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42 Title and theme derived from a workshop delivered by Dr Joan Lippincott at CLT in December 2009
Facilitators: Aziza Ellozy, CLT and Hoda Mostafa, CLT, Maha Bali, CLT

CLT Fora

Courtesy In The Classroom
Over recent years it has been noted by many members of the university community that there has been a seemingly inexorable rise in disruptive behavior in the classroom and lecture hall. Undoubtedly part of this is due to the invasion of learning spaces by mobiles, laptops and other technologies – texting, walking out to take calls etc. - but there may be other factors involved. This phenomenon has become a source of growing concern for both professors and engaged students alike. The emphasis on appropriate college behavior stressed, for example, in FYE seems to have had little effect. We think it is important that teachers and learners alike come together to share and discuss strategies by which these discourtesies can be considered.

Facilitators: Richard Hoath, Rhetoric and Composition Department & Michael Reimer, History Department

Assessment of Teaching Effectiveness at AUC
For the purpose of this forum, effective teaching can be defined as: Clear communication of appropriate course content in an environment that enhances learning. The question we need to address is: Do the current methods of teaching evaluation at AUC give a good measure of teaching effectiveness or is there room for improvement?

Facilitator: Mahmoud Farag, Engineering Department
Reflections on “Faculty Development”

Dr. Aziza Ellozy, Director, Center for Learning and Teaching
Associate Dean for Learning Technologies

Last spring, I attended the School of Sciences and Engineering’s (SSE) retreat gathering in Alexandria, and as usual it was an inspiring and fun weekend. One of the items featured on the agenda pertained to “Faculty Development”, and since the Center for Learning and Teaching (CLT) is in the “faculty development” business, it was natural that I pay particular attention to what was going to be discussed. To my surprise, the only topic addressed insofar as my recollection goes, was the issue of faculty compensation (specifically with regards to differences in faculty benefits such as housing and school tuition based on national origin, passport status etc).

This was not the first meeting I attend where this term was used, but I did not pay much attention assuming that it referred to the more traditional interpretation of the term, namely the use of sabbaticals, the attendance of professional meetings, the availability of teaching and research grants and the like.

During the SSE presentation it dawned on me that, right now at AUC, “faculty development” has become synonymous with faculty compensation.43 This is not only a very different interpretation of the term (the issue of salaries and benefits do not generally figure in faculty development programs), but it belittles the importance of the faculty development movement that has taken place in the last two decades. Recognizing the challenges that face the professoriate in today’s higher education landscape, many colleges and universities in the US (and elsewhere) have expanded the traditional responsibilities of such programs so as to include a much wider range of activities.

Using the broad definition of faculty development as the “organized support to help faculty develop as teachers, scholars and citizens of their campuses, professions and broader communities” [Sorcinelli et al 2006], let us examine the characteristics of “modern” faculty development programs and the factors responsible for expanding their roles and responsibilities. Let us also examine how AUC fares compared to other institutions and what we can do better.

This is a very broad subject which cannot be tackled in a short newsletter. Suffice it to say that the growing awareness in academia of the need for an expanded role for faculty development took a new urgency in the US in the late 80’s when a number of important reports (such as Integrity in the College Curriculum, Association of American Colleges and Universities, 1985) were critical of American higher education and called for reform and increased accountability.

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This was also evidenced in the September 28th 2001 General Faculty meeting where “faculty development” appeared in the minutes of the Senate’s May 4th, 2010 meeting. It said: “Some things were addressed immediately but major points such as faculty development will take longer...” in response to the various fora that we had last year.
Concurrently, research on how people learn highlighted the need to shift the emphasis from what teachers do to what and how students learn, from emphasis on transmitting information to emphasis on students' higher order thinking skills, from grading to learning outcomes assessment. Faculty were encouraged to redesign their courses, to adopt active learning strategies, to assess and evaluate student learning outcomes and to use new teaching and learning technologies effectively. Hence it is not surprising that faculty development as a field of practice first emerged as a means to assist faculty in their instructional efforts. This is when (late 80s to 90s) numerous institutions founded teaching and learning centers. At AUC, the CLT was established in 2002.

The educational landscape continues to change significantly and faculty are facing greater challenges to adapt to this new environment. What we are experiencing at AUC is typical: increasing competition, tightening of resources, demands for new skills, demands for increased research output, increase in number of students, demands for delivering a “world class” education and preparing our students for a “global” future, linking research to community problems or entrepreneurial activities etc, etc.

It is not surprising therefore that there is widespread recognition that faculty members need broader support in order to meet these growing demands. In Sorcinelli et al.’s words (2006) “colleges and universities committed to high productivity and quality will be well advised to situate faculty development at the center of their institutional planning” (p27).

What is this support they are talking about and what does it entail? The Professional and Organizational Development Network (POD), the premier US professional association devoted to faculty development, recognizes three approaches to an institution’s faculty development efforts. These are illustrated in the following flow chart.
Using this framework as guideline, I would argue that AUC offers substantial (albeit dispersed) institutional support for faculty development which is comparable to any US institution that has made it a more intentional goal (see Table 1). Ideally this support should be tailored to individual faculty needs, a responsibility that could lie within the departments. The support that is glaringly missing is the pre-tenure mentoring for junior faculty. This and other important concerns have been expressed in the OIR report on 2009 fulltime faculty survey. Some have been addressed in recent initiatives such as the restructuring of the Provost’s office and the budding administrative “workshop” for chairs. Teaching loads and faculty compensation could very well be the next order of priority.

Sources:


"What is faculty Development?" Professional and Organizational Development Network in Higher Education. Web. 11 October 2010.
<http://www.podnetwork.org/faculty_development/definitions.htm>
Lecture Capture at AUC: Enhanced Active Learning

Dr Pandeli Glavanis, Associate Director, CLT

Several previous CLT Newsletters and workshops have advocated active learning strategies in the classroom as a way of enhancing “student-centered learning” and thus transforming students from being passive listeners into active learners. Faculty response is invariably positive as most recognize the limitations of the traditional lecture format. Nevertheless, faculty have also expressed concerns over the “sanctity” of the syllabus and whether they will be able to cover what is required in the time available. Thus, although active learning in the classroom has been accepted in principle many colleagues are concerned to make the move and adopt such innovative teaching strategies for fear of not being able to cover the basic syllabus. Lecture capture which was recently introduced at AUC resolves this dilemma for faculty. Let me elaborate.

Lecture capture (or Panopto Focus as it is known at AUC) is an exciting new extremely user-friendly instructional technology that has drawn the attention of several faculty across the campus since it was first introduced during the imposed H1N1 closure of the university a few months ago. Faculty pre-record their lectures and then make them available to students over the internet from a secure server. Other faculty use lecture capture in order to provide additional material and some cases in order to demonstrate the correct solutions to particular problems. The overall effect, irrespective of how the software is used is that it has enabled such faculty to restructure how they make use of class time. It enables them to focus on active learning experiences during class without the fear of not covering essential course material. It is not surprising therefore that this new instructional technology has drawn the attention of faculty across campuses in many major universities such as Duke, Stanford, UC Berkeley and Wisconsin-Madison.

Survey results from universities that have made use of lecture capture are very encouraging. The popularity of lecture capture across USA campuses is confirmed by survey results that indicate that the majority of college students who have used it now prefer courses that offer recorded lectures over those that do not. Students cite convenience, flexibility and positive impact on learning as the main reasons to have recorded lectures. (Fernandez, Simo & Sallan, 2009) Similar encouraging responses were obtained from the 16 faculty at AUC who have participated in the first pilot. Faculty represented departments from all the Schools at AUC underscoring its flexibility irrespective of the discipline. Of the faculty that did use lecture capture 67% indicated that they were “very satisfied” and the remaining 33% indicated that they were “somewhat satisfied”. Of particular interest is also the variety of ways in which AUC faculty made use of lecture capture. These included:
Furthermore, when AUC faculty were asked how lecture capture contributed to learning they also responded with different answers:

<table>
<thead>
<tr>
<th>Source: CLT survey of AUC faculty piloting lecture capture, Spring 2010</th>
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</thead>
<tbody>
<tr>
<td>Facilitating class discussion of theory</td>
</tr>
<tr>
<td>Providing an opportunity to revise complex theoretical issues</td>
</tr>
<tr>
<td>Generating points for students to discuss online as groups or as individuals</td>
</tr>
<tr>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>

The variety of ways in which lecture capture can be used is also reflected in the responses of students who noted the following forms of use:

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepare for in-class discussion</td>
<td>4</td>
<td>20</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Prepare for online discussion</td>
<td>2</td>
<td>12</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Understand how problems/exercises are solved</td>
<td>9</td>
<td>15</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Revise for the end of semester</td>
<td>15</td>
<td>13</td>
<td>3</td>
<td>0</td>
</tr>
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<table>
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<tr>
<th>Source: CLT survey of students using lecture capture, Spring 2010</th>
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<td>Lecture capture is still a new instructional technology whose potential is yet to be fully realized. Nevertheless, there are two important points that need to be made even at this early phase. First, the software being used currently at AUC (Panopto) is extremely user-friendly, does not require any specialized hardware and can be installed on any computer or a lap top very quickly. Comments from AUC faculty who used it confirm this:</td>
</tr>
</tbody>
</table>

- “Excellent capture! It is a real efficient software” Dr Sanaa Makhlouf, Rhetoric & Composition
- “This is fabulous!! Really, I can’t thank you enough. I am delighted with the recording” Ms Sophie Farag, ELI |
“This is great technology and it will allow me to keep one lecture in reserve, just in case we miss any more days” Dr Stephen Everhart, Department of Management

“Amazing!” Dr Brandon Canfield, Scientific Thinking Coordinator.

Second, preliminary surveys of students exposed to lecture capture are generally very positive. A couple of comments from these surveys confirm this:

“Students report gaining a better understanding of class material in courses that used the technology.”

“Undergraduate students have reported that podcasts helped them stay focused on the course, made learning more fun and informal, supported independent learning, and enabled deep engagement with course material.” (Zhu and Bergom, 2010; p 2)

N.B. For further information and the installation of the Panopto software on your computer/laptop for trial use, please contact Mr Ahmad Zorkani at CLT (zorex@aucegypt.edu).

Sources:

Assessment of Teaching Quality: A Personal Contribution to the Current Debate

Dr Pandeli Glavanis, Associate Director, CLT

The task of assessing the quality, quantity and effectiveness of teaching in higher education has preoccupied faculty, university administrators, students, assessment agencies and many more for several decades. What is widely accepted, however, by all involved in such activities is the complex nature of the task especially as it is acknowledged that teaching itself is a highly complex process. In fact some of the experts in assessing teaching quality have noted that “any good approach to evaluating teaching will reflect the complexity of teaching itself”. (Chism, 1977) The task is further compounded by two additional factors: First, there is an absence of a consensus of what constitutes effective and good teaching due to the tremendous variety in teaching itself given the different types of teaching required by the different subject areas and the respective teaching skills required. Second, the increasing pressure on higher education to demonstrate excellence in teaching quality from the general public, students, parents and of course the various assessment agencies that monitor quality in higher education. Furthermore, and if the above were not sufficient grounds for demonstrating the complexity of the task at hand, higher education is also caught up in what is accepted by all to be a major revolution in teaching and learning. Student-centred teaching paradigms are replacing traditional modes of teaching and learning technologies have dramatically affected the way students learn and interact with course material. Nevertheless, and despite the complexities involved every institution of higher education continues to implement its own respective teaching effectiveness methodology and seeks to improve it continuously. It is, of course, understandable why this is the case. On the one hand university administrations require a methodology by which to assess faculty performance for the purpose of promotion and tenure and on the other hand faculty also need to evaluate their respective teaching methods for the purpose of professional development and satisfaction. It is, of course, beyond the scope of a short essay to engage with all the different dimensions of the task of assessing teaching effectiveness, but it is possible to raise a couple of points which may be considered as a personal contribution to the current debate at AUC. Let me elaborate.

Despite the complexity of the issue and the plethora of academic contributions that highlight particular dimensions of the problem at hand there also appears to be a degree of generic consensus on what constitutes effective teaching. Among those factors that are consistently advanced are: subject matter competence, preparation and organization, clarity, enthusiasm, and interpersonal rapport. (Chism, 1999) In a different summative assessment of teaching quality Arreola (2007) also identifies five factors which are: content expertise, instructional design skills, instructional delivery skills, instructional assessment skills, and course management skills. Furthermore, Fink (2008) proposes four key elements in assessing teaching quality and they are: course design, interaction with students, overall quality of the student learning experience, and improvement over time. It is possible to suggest that although there are minor differences the three contributions cited above do present us with an overall approach that can be adapted to most teaching irrespective of its subject specialism. Disciplinary expertise emerges as one of the key elements alongside an in depth understanding of students and how they learn as well as generic pedagogic skills which
include managing courses and classes.
Following from the above it is important to consider how these different factors which are seen as exemplifying teaching quality are actually evaluated and quantified in higher education institutions. Student feedback in the form of end of semester surveys is the most common form used by most institutions. It is, of course, easy to implement and if we want to be honest it is also a method that has gained considerable credibility despite its limitations. The survey is usually completed by large numbers of beneficiaries and as such is seen as a clear reflection of the effectiveness of teaching. Furthermore, institutions make use of student evaluations as a means of satisfying public accountability and for recruitment purposes. However, it is quite obvious immediately that this is not an adequate methodology despite its extensive use. The factors identified above cannot be evaluated via student surveys since it is also widely accepted that students are not competent to evaluate certain of these factors. For example students do not have the expertise to evaluate disciplinary competence, effective course design, curriculum development and appropriate assessment methods to name but a few. Furthermore, students are unable to evaluate other areas such commitment to teaching enhancement, use of emerging learning technologies, and support for departmental efforts to develop curricula. Thus, the reliance on student feedback surveys, although important is severely limited in assessing teaching effectiveness.

The gap left by student feedback surveys of teaching can only be covered by faculty themselves. This however generates its own complex and controversial issues. Peer evaluations of teaching can be seen to incorporate bias, lack of expertise by faculty to carry out such evaluations and of course the considerable effort involved especially in large departments. It is for this reason that peer evaluations are not in themselves either a substitute for student feedback nor are they a sufficient complement. Individual faculty reflection of upon their own teaching is another strategy that many universities are using. Faculty are encouraged to generate their own teaching portfolios of tasks and developments and to engage in self-reflection. This activity, of course, also has its own limitations and demands a considerable effort on the part of faculty. Nevertheless, institutions which have adopted teaching portfolios indicate both faculty and administration satisfaction with the results when combined with other methodologies of assessment of teaching effectiveness.

In conclusion, therefore, it is possible to suggest that there is no single methodology which can capture the nature and quality of teaching effectiveness as such. Each methodology has its own limitations and most of them require considerable effort and time, especially those that involve faculty as peer-assessors or in producing their own teaching portfolios. Institutions need to recognize the complexity of assessing teaching effectiveness and rely on a methodology of triangulating methods in tandem to providing both time and resource for the different tasks to be carried out.

**N.B. In the next issue Dr Mahmoud Farag will take up this issue in greater detail with regard to its implementation at AUC.**

**Sources**
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Improvement and Assessment of Teaching Effectiveness: Some Issues under Discussion

Dr. Mahmoud Farag, Chair of the Senate Faculty Affairs Committee, 2010 – 2011

This article builds on the contribution of Dr. Pandeli Glavanis in the last issue of New Chalk Talk (November 23, 2010, Volume 10, Issue 7) and is a follow-up on the report of the Senate working group on “Teaching Effectiveness at AUC: Assessment and Improvement”, May 2003. Many of the issues in this article were raised in the CLT Forum on Assessment of Teaching Effectiveness, November 3, 2010 and in the subsequent discussions in the Faculty Affairs Committee of the Senate. As the reader will see, this is still a work in progress and I welcome suggestions for improvement and ideas on how to proceed from here. It is hoped that eventually a statement on improvement and assessment of teaching effectiveness will be adopted by the University Senate next spring.

The Senate working group of 2003 defined effective teaching as: Clear communication of appropriate course content in an environment that enhances learning and encourages the student to analyze and think critically and creatively. This definition gives the three major aspects of teaching effectiveness, which can be used for its assessment:

1. Clear communication of the subject matter reflects the faculty member’s pedagogic skills and awareness of how the students learn. This can be assessed from student feedback and results of student evaluation of instruction.
2. The appropriateness of course content reflects the faculty member’s knowledge of how the course fits within the curriculum, recent development in the discipline, and general competence in the subject matter. This can be assessed by peers on the basis of course syllabus, content and textbooks, examples of student work, and samples of exams and assignments.
3. Enhancing student learning and encouraging them to analyze and think critically reflects the faculty member’s teaching philosophy, course management skills, and strategies for getting students engaged in the course material and discussions. This can be assessed on the basis of the faculty member’s statement on teaching, self-reflection, use of new and emerging technologies, engagement in teaching development activities, and interaction with the teaching community.

From Dr. Pandeli’s article and from the above it becomes clear that for a reliable assessment of teaching effectiveness we need to take all the above three element into consideration. It is proposed here that the three elements be given equal weight when assessing the teaching effectiveness.

While all the three elements are part of the academic environment at AUC, they are applied in different degrees in assessment of teaching effectiveness. Seeking student feedback and student evaluation of instruction are now established at AUC which explains why, in some cases, they are taken as the only measure of teaching effectiveness. Peer evaluation is less widely used at AUC than student evaluation of instruction as it requires more time and may yield variable, and in some cases biased, results unless done well. The third element, which is
faculty members’ input, is part of the Annual Faculty Report and in some cases is not given enough attention by the faculty members themselves as a tool for self improvement, or by their departments as a tool for assessment.

The question that we need to answer now is how can we make the above three elements an integral part of teaching improvement and assessment at AUC, and how much weight should be assigned to each of them? The discussion in the CLT forum and in the faculty affairs committee points to the teaching portfolio as an important instrument which can provide information for assessment of both items 2 and 3 above. The portfolio is prepared by the faculty member and consists of two main sections (course content and efforts to enhance student learning). The items to be included in each section of the portfolio depend on the nature of the discipline and should be developed by departments in consultation with their faculty. Examples of items that can be included in these two sections of the portfolio include the following:

**Appropriateness of course content:**
- Course syllabus
- Course reading material, textbooks, case studies, exercises and problems, audiovisual material
- Samples of student work, assignments, research papers, and exams, preferably for different levels in the class (e.g. A, B, C)
- Grade distribution in the course
- Expected course outcomes and how they fit with the overall objectives of the curriculum of the program
- How the course content reflects recent developments in the discipline and efforts to update the content if the course has been taught for several years.
- The variety and diversity of courses taught
- Preparation of new courses
- Reports on class visits

**Efforts to enhance student learning:**
- Self reflection and statement on teaching philosophy
- Strategies for getting students engaged in the course material and discussions.
- Grading policy
- Office hours and accessibility/availability to students
- Means of providing timely feedback to students
- Use of technology to enhance content delivery
- Professional development activities related to teaching
- Grants related to teaching enhancement and attending conferences related to teaching
- Publishing in teaching journals
- Mentoring and advising undergraduate and graduate students
- Supervising student theses, independent studies and directed research
- Conducting CLT mid-semester surveys to get student input
To help us improve this approach to assessment of teaching effectiveness, we need your input on the following points:

1. Do the three aspects (student evaluation of instruction, appropriateness of course material, and enhancement of student learning and critical thinking skills) give adequate description of teaching effectiveness? If not, please comment.

2. Should the three aspects be given equal weight when assessing teaching effectiveness? If not, what do you suggest?

3. Other comments and suggestions to the faculty affairs committee.
"The revolution cannot be ignored at this time. It is a historic time that will change most people's perspectives.” – English Language instructor in CLT survey

Educators from Dewey to Freire emphasize the importance of learning that revolves around students’ own lived experiences. Affirming the pedagogical potential of incorporating Egypt’s revolution into AUC courses, CLT conducted a survey to learn about how faculty planned to modify their teaching this semester. Based on feedback from the survey, CLT also held a faculty forum on Sunday March 6 entitled “Pedagogy and the Revolution” facilitated by Michael Reimer from History. This newsletter summarizes some of the key findings from the survey and the forum.

Integrating revolutionary themes is more straightforward in some disciplines than others. Those who teach Political Science, Economics, and Journalism and Mass Communication, have found direct ways of doing so, whether in terms of reflecting back on the revolution (e.g. analyzing media usage during the demonstrations, analyzing the “anatomy of the rebellion” in light of game theory in economics) or looking forwards, like studying the March 19th constitutional changes, predicting future economic reforms for Egypt, writing policy suggestions to political leaders, fundraising for the statue of the martyrs in Tahrir square, discussing possible post-Mubarak foreign policy issues, etc. Faculty from SAPE have decided to focus on analyzing the social problems Egypt needs to tackle after the revolution, or having students observe and reflect on how and why people are changing because of the revolution. In the Management department, a business ethics course will include student projects covering “the big corruption problems and how to regulate individual as well as institutional behavior going forward.” In Rhetoric and Composition, Ebony Coletu is focusing her course on looking at the life histories of figures who have inspired or instigated revolutions all over the world, including the ones in progress in Egypt and Libya. The History department’s team-taught course “Isqat al Nizam” will relate the recent revolution to previous revolutions in Egyptian and world history.

Even faculty in the School of Sciences and Engineering have found ways of integrating the revolution into their courses. For example, the second Scientific Thinking general lecture was a panel discussion on how to use critical thinking to evaluate the reliability of information, given the new social media and the recent communication shutdown during the revolution. This panel included young activists and bloggers, as well as JRMC professor Kim Fox. Some instructors of Scientific Thinking asked students to look at conflicting reports on Mubarak’s fortune, on events of the revolution, and to evaluate the reliability of the evidence presented. In an Architectural Engineering course, students will design an Egypt Expo building for their...
projects, during which they will reflect on the kind of image of Egypt they wish to present to
the world. After a brainstorming meeting with CLT staff, a Mathematics professor found
several applications for mathematics related to the revolution, such as having students do a
rich sensitivity analysis on the consumables in Tahrir square or look at functions relating the
corruption index to various criteria.
Some faculty felt there should be a shift in pedagogical outlook, not just in course content.
For example, some faculty in the survey said they would involve AUC students more in
course-related decision-making. A Management professor said he expected more critical
analysis in class, and Carol Clark from ELI emphasized the increasing relevance of using
debate to promote critical thinking. Michael Reimer, who facilitated the workshop, suggested
that our role as teachers is to empower students to become active citizens, saying “we don’t
want to predict the future, we want our students to make it.” One Architectural Engineering
instructor said in our survey,

“I want them [students] to feel empowered and responsible for the perception of the world
of their work and accomplishments”.45

Even without directly connecting one’s course to the revolution, several faculty in our survey
felt a difference in student attitudes. One Economics instructor said: “Students were very
keen and enthusiastic to help their country … I shall do my best to take full advantage of this
patriotism and enthusiasm.” Faculty from different disciplines also reported that students
spontaneously made their own connections between course themes and the revolution.

One extracurricular activity proposed by Ahmed Tolba (Management) was inspired by the
Model United Nations – his idea is to have students create “model” political parties for Egypt
and debate their respective strategies. This would be an interdisciplinary (and hopefully inter-
university) endeavor as students would have to explore the various aspects of Egypt’s
development.

Parting Thoughts
An important cautionary note that was raised and discussed during the forum was that
AUCians need to realize that their privileged background and education do not necessarily
make them as well-informed as they should be, nor will it later give them the right or privilege
to make decisions on behalf of the Egyptian population. I therefore suggested that activities
where students are asked to recommend policies or reforms should be grounded in
community-based research that involves Egyptians from all walks of life rather than students’
own personal academic analyses.

Faculty in both the forum and the survey recognized that not all AUC students will necessarily
be pro-revolution. Whilst I believe we cannot and should not be neutral on issues of social
justice, some faculty reminded us of the importance of reflecting on ways of tackling
revolution themes without ostracizing those who are (or whose families are) against the
revolution or those who did not participate.

45 Stay tuned for two workshops on encouraging active citizenship and student-centered pedagogy: Pandeli Glavanis’ workshop entitled
“Educating Citizens: Preparing AUC Undergraduates for the New Egypt”, and a more general workshop “The Art of Discussion Leading”
facilitated by Aziza Ellozy and Maha Bali.
In view of the consensus among our faculty that student evaluations are an insufficient indicator of teaching performance, a discussion is taking place on campus on how teaching should be evaluated. I hope that the following article (reprinted with permission) will help guide us towards an effective teaching performance evaluation model.

Aziza Ellozy, CLT
Director

How to Evaluate Teaching
Richard M. Felder⁶, Rebecca Brent⁷
North Carolina State University • Raleigh, NC 27695

Student ratings of teaching get a bad rap in some academic circles. Faculty members are repeatedly and authoritatively assured that “They’re just popularity contests,” “High ratings go to the easy graders,” and “If I get low ratings it’s only because I set high standards and students don’t like demanding teachers.”

In fact, student ratings have been repeatedly shown to have a high level of validity, and those complaints about them have been debunked by research.[1–3] Students are in a better position than anyone else to judge certain aspects of teaching, such as how clear, interesting, respectful, and fair a course instructor is, and they’re the only ones who can say how an instructor has influenced their attitude toward the course subject, their motivation to learn it, and their self-confidence. For these and other reasons, student ratings should be considered an essential component of faculty teaching performance evaluation.

But it makes little sense to use only student ratings. Few students are equipped to judge whether a course is accurate and up-to-date, the assignments and tests are appropriately challenging, and the content and learning objectives are consistent with the course’s intended role in the department (for example, to serve as a prerequisite to other departmental courses or to address certain outcomes in the department’s accreditation plan). Only faculty colleagues are in a position to make such judgments.

Moreover, classroom teaching may only be a small part of a faculty member’s educational activities. He/she may also advise students, develop new courses and redesign old ones, adapt and develop courseware and innovative teaching strategies for use in both traditional classroom instruction and distance education, coordinate departmental preparation for accreditation, offer seminars, workshops, consulting, and mentoring to help faculty colleagues and/or graduate students improve their teaching skills, write textbooks, and conduct educational research. All of these activities can have a dramatic effect on a department’s teaching quality, student retention, and chances of receiving full accreditation, but student ratings don’t indicate whether and how well an instructor is doing them.

In short, a key to effective teaching evaluation is to collect data from multiple sources (triangulation), making sure that all education-related activities are rated by the people best

⁶ Richard M. Felder is Hoechst Celanese Professor Emeritus of Chemical Engineering at North Caroline State University and a highly published author in pedagogical scholarship. He is the founder of the National Effective Teaching Institute (NETI)
⁷ Rebecca Brent is an education consultant specializing in faculty development for effective university teaching
qualified to rate them. Figure 1 presents a multiple-source evaluation model designed to work that way. The remainder of this column briefly elaborates on the model components.

**Peer Ratings**

The usual form of peer evaluation, in which an observer visits a lecture and jots down whatever happens to catch his or her attention, has its own drawbacks. Most obviously, a single observed class may not be representative of someone's normal teaching. Even if it is, faculty members have widely disparate ideas of what constitutes good teaching, so that the same class could get an excellent rating from one observer and a poor rating from another. More importantly, a single class observation provides no assessment data at all on aspects of teaching performance other than lecturing.

A far more effective procedure is for two or more reviewers to use standardized checklists to rate instructional materials and at least two class observations independently and then to reconcile their ratings.[4] The checklists should consist of items taken from a list of attributes known to correlate with effective teaching,[5,6] and should be approved by the department faculty before they are used. This procedure has a high level of inter-rater reliability and includes measures to address commonly expressed concerns about peer review, including possible rater bias and excessive time demands imposed on reviewers.[4]

![Figure 1. Teaching Performance Evaluation Model](image-url)
Student Ratings
Tested forms for student evaluation of teaching are given in a recent National Research Council publication,[7] and more information about how to make student evaluations effective is provided in that reference and by Felder.[8] Faculty performance evaluations should take into account student ratings collected over a period of several years, with relatively little weight being attached to ratings of someone’s first semester of teaching.

The Teaching Portfolio
Just as some performance assessment data can best be provided by students and some by peers, certain important information can only be supplied by the faculty member being reviewed. Instructors should assemble materials summarizing all of their education-related activities, including developing new courses and redesigning old ones, developing and evaluating innovative instructional methods, advising and mentoring students, writing new texts and courseware, providing instructional development to faculty colleagues and graduate students, and carrying out educational research. All of these materials except those related to educational research (Which we discuss in the next section) should be incorporated into a teaching portfolio, along with summaries of student ratings over the past two or three years, peer ratings, and reference letters from alumni and colleagues at other institutions who are familiar with the instructor’s educational activities. The portfolio provides a solid basis for evaluating the faculty member’s teaching performance and contributions to education.[9–11]

The Scholarship of Teaching and Learning
When done properly, educational research is every bit as demanding, rigorous, and important to the future of an academic discipline as traditional disciplinary research.[12] There is no legitimate reason to separate the two categories of research by making educational scholarship just another component of teaching performance, or worse, not to count it at all in faculty performance reviews. Any material related to educational research (including lists of grants, publications, presentations, and awards, along with supporting letters) should be combined with documentation of disciplinary research in faculty activity reports and in tenure and promotion dossiers and the same high standards should be applied to the evaluation of performance in both research categories.

Consistency of Multiple-Source Ratings
For triangulation to be most effective, data from different sources should overlap to the greatest extent possible. For example, items on student rating forms related to aspects of teaching that both students and peers are equipped to evaluate (e.g., the instructor’s preparedness, clarity, responsiveness to questions, and respect for students) should parallel items in peer review checklists. If the two sets of ratings lead to the same conclusions, it affirms the validity of both, while if they disagree substantially it suggests that at least one of the sets is suspect and further investigation should be undertaken. For example, the department head might bring in someone from outside the department (such as a consultant from the campus center for teaching and learning) to conduct focus group interviews with students related to the issues in question.
**Summative and Formative Evaluation**

Evaluation of teaching may be *summative* (to provide data for use in making decisions regarding reappointment, tenure, promotion, and merit raises, and for selection of award recipients) or *formative* (to improve the teaching of the instructor being evaluated). The full procedure depicted in Figure 1 and described above should be implemented for summative evaluation. Once the portfolio is assembled, only minor effort should be required to update it in successive years. For formative evaluation, a subset of the procedure should be carried out (for example, only one peer rater may be used), and the results should be shared only with the instructor rather than being passed on to the department head or a performance review committee. Carrying out formative reviews in the first few years of a faculty member's career should substantially increase the chances that a subsequent summative review will be favorable.

**References**


Inquiry-Based Learning: A Powerful Approach to Facilitating Learning in Any Discipline

Gihan Osman, Ph.D., Indiana University, Bloomington

Inquiry-Based Learning (IBL) is increasingly advocated as an approach to learning that helps students bridge the gap between their life as university students and their present experiences outside school as well as their future as employees’ productive members of the 21st century workplace. IBL is an umbrella term used to describe “an array of classroom practices that promote student learning through guided and, increasingly, independent investigation of complex questions and problems, often for which there is no single answer” (Lee, 2004, p.9).

In the process, students learn to formulate appropriate questions, identify problems, explore resources, examine alternative solutions or hypotheses, find and evaluate evidence, choose among solutions, and communicate results and conclusions (Lee, 2004). By engaging in IBL over a longer period of time, students are expected to develop life-long learning attitudes and skills such as critical thinking, problem-solving, effective communication, creativity, adaptive expertise, pro-activity, risk-taking, and a tolerance to ambiguity (Association of American Colleges and Universities, 2004; Lee, 2004).

Like many instructors, IBL might seem like a dramatic shift from what you are currently doing in your classrooms. However, that should not deter you from trying it out. IBL is not an all or nothing approach to teaching. Any learning activity that encourages student inquiry falls somewhere on the IBL continuum. Interactive lectures, problem-solving, group discussions, and research projects are all examples of IBL. However, a class lecture in which you are the only participant would not qualify (Lee, 2004). Think of IBL integration as an evolutionary process. Start small and finish big. Below are some guidelines to help you adopt a more inquired-inspired approach in your classroom (Duffy, 2002; Kahn & O’Rourke, 2005):

1. **Select topics of interest and relevance to the students.** Goals and needs influence how learners process information and what knowledge they construct (Duffy, 2002). It is thus important to identify students’ general interests and goals for the class and find ways to incorporate these in the learning activities you design.

2. **Build on existing knowledge and skills.** It is vital to acknowledge that students’ knowledge and experience add value to the class, and encourage learners to voice what they know; allow them to discover how it interacts and conflicts with new information/experiences. This becomes an excellent opportunity for instructors to diagnose students’ misconceptions and scaffold students in addressing them.

3. **Help students identify new learning and information needs.** Instead of informing students of the information they need to answer their inquiries, ask them to brainstorm what knowledge and skills they need to build in order to solve their queries. At this point, you might provide feedback on their choices as well as guidance as to how to address those needs.

4. **Encourage students to explore a variety of resources and evidence.** Encourage students to identify and use the various formal and informal resources they might find useful.
5. to answer their inquiries in their environment: peers, the library, the Internet, yourself, their experiences, etc.

6. **Scaffold students in evaluating resources and evidence.** A valuable component of the process is evaluating resources and evidence. We are not doing students any service by giving them the impression that all ideas and data are equally valid. Help students learn how to evaluate resources and the evidence they use for its credibility and relevance.

7. **Prompt students to reflect on their learning experiences.** For students to become lifelong learners, they need to understand how they scaffold and evaluate their own learning as well as that of others. Encourage students to analyze their learning processes and products, as well as the contributions of peers and yourself (the instructor) to their experiences.

8. **Foster a classroom culture in which inquiry is promoted.** It is often shocking to ask students to suddenly have a voice and think critically and creatively in class in which they are generally encouraged to be passive. Foster a culture of trust in which students’ ideas and knowledge are respected, yet evaluated. Start with yourself by modeling openness to inquiry.

Finally, during the workshops I conducted about IBL for CLT this spring, I noticed that AUC instructors of varied disciplines are skeptical of the applicability of inquiry-based learning to their particular area. Learning through inquiry is a universal human phenomenon. As such, the general guidelines for IBL outlined above are expected to hold for any discipline. However, we can expect differences to emerge from variances in the nature of inquiry across disciplines. Experts in different fields often vary in how they frame their inquiries, in the tools and methods they use to investigate their questions, in the resources they explore, and in their perception of what constitutes good evidence. These differences should be acknowledged and advocated by instructors facilitating learning in their respective disciplines to help the learners bridge the gap between themselves as novice inquirers in a particular discipline and the experts that we hope they would soon become – should that align with their goals and needs!

**Sources**


The Center for Learning and Teaching (CLT) has long been an advocate for ‘active learning’ and numerous “New Chalk Talk” issues and CLT workshops have been devoted to the subject48. But the urgency to sound out the call again comes at the onset of the new 2+2 schedule which AUC is implementing on a trial basis this year.

When this schedule was announced last spring, it was met with resistance and anger from students. The reaction may have resulted in part from the students’ perception of not having been consulted on the matter, but their main concern was what they saw as the inevitable decline of their classroom experience due to longer classes and to more class sessions during the day. A 75-minute lecture, they said, would be too long and too boring because their attention span could not last that long. The daily assembly hour was the compromise that ensued.

What was interesting to me then was the skepticism with which many faculty members reacted to this complaint. They saw it as yet another instance of how our students are spoiled. Yet, studies on attention span have shown that adult learners can stay tuned to a lecture for no more than 15 to 20 minutes at a time, and this at the beginning of the class. In 1976, A. H. Johnstone and F. Percival observing students in over 90 lectures given by 12 different lecturers reported this 15-20-minute window. The study showed that as the lecture proceeded, the attention span shortened and fell to three or four minutes towards the end of the lecture. Other studies have supported these findings (Hartley and Davies, 1978); (Burns, 1985) (Middendorf & Kalish, 1996). In addition, current literature emphasizes the limitations of the traditional lecture format when it comes to promoting critical thinking and long-term retention, and calls for promoting more learner-centered practices.

Historically the lecture had originated from the time where there were very few books and the most efficient way to communicate information was to read to people who would take notes of their own. Despite that this need is long gone, lecturing continues to be the most prevalent mode of instruction. Over forty years ago, McKeachie wrote "College teaching and lecturing have been so long associated that when one pictures a college professor in a classroom, he almost inevitably pictures him as lecturing." (Gage, 1963) This has still not changed much.

Nowadays research in the science of learning has indicated that active learning is one of the most important components of the learning process, and a body of literature has challenged colleges and universities to develop instructional approaches that transform students from passive listeners to active learners.

Within this context, strategies that promote active learning are instructional activities that provide students with opportunities to do things, to learn independently and from one another and to reflect about what they are doing and about their learning. These activities

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48 All our newsletters and workshops can be found at the CLT website http://www.aucegypt.edu/academics/llt/clt/Pages/default.aspx
involve students in higher order thinking skills (analysis, synthesis, evaluation) and emphasize students' exploration of attitudes and values.

The term ‘active learning’ is an umbrella term that covers a range of teaching practices (from simple pair-share-think activities to in-class discussions to more elaborate pedagogies such as community-based learning, inquiry- or problem based learning, role-playing, etc to name a few).

As our Provost suggested, if this 2 + 2 experiment is to be successful, we need to make use of the extra time of the new schedule to engage our students and to “take advantage of the opportunities it affords to experiment with new ways of teaching and learning” (notes from the Provost’s 2+2 Task Force).

This year most of CLT’s workshops will revolve around active learning strategies in the classroom (please refer to this semester’s “Active Learning Series” on our website and to our announcements in News@auc). If you would like us to add you to our mailing list of “CLT friends”, please send us an email at CLT@aucegypt.edu

We encourage you to attend these workshops, not necessarily because you “need” to, but because your participation in the discourse, the sharing of your experience and your interaction with faculty from other disciplines is in itself an enriching learning experience for all. One of my staff members once asked me, “Dr Ellozy, how can you attend workshops that are repeated again and again? Don’t you get bored?” The fact of the matter is that I don’t, mostly because each group of participants brings with it a different dynamic to the discussion and every time it is a different learning experience for me.

Sources
Critical Friendship Circles
Phyllis Wachob, English Language Institute

A critical friend is an oxymoron, a contradiction in terms. A critic is one who tells us good and bad things about our performance. A friend supports us, whether something is good or bad. A critic is not afraid of hurting our feelings, but a friend cares very much. So, how can someone be both a critic and a friend? On the other hand, what better kind of critic can you find than a friend? There are no answers to this conundrum, but there are many reasons for trying.

Critical Friendship Circles (CFC) are groups of students (or teachers) that meet to solve problems and give feedback on classroom performance. Protocols are formal structures for giving feedback by peers. By formalizing the process, everyone knows the 'rules of the game' and can play their roles as critics and friends in the appropriate way at the appropriate time. By taking turns to present their work in class, students can practice presentation skills. They also learn to listen carefully without the need to ‘defend’ themselves. Circles are groups of mutually supportive friends, so all friends learn to formulate helpful feedback in supportive language, and brainstorm together for finding solutions to concerns.

Feedback is given in two basic ways, warm and cool. The final feedback is the challenge or ways to improve the presentation. A feedback session using a protocol could look like this.

**Participants:**
- Presenter
- Facilitator (one of the 'friends')
- Recorder (uses a form)
- Friends

Total Time: 10-12 minutes

**Presentation:** (1-2 minutes) After giving the class presentation, the presenter offers a short self-critique or brings up questions or problems for the CFC to discuss. The presenter might ask such questions as, "I thought I was doing X, but in class… What do you think went wrong?" "I wanted to convey Y, do you think I was successful or not?" The recorder notes the major points and the question(s).

**Probing session:** (1-2 minutes) The facilitator leads the probing session. Friends ask probing questions prompted by what they heard and said. They might ask for clarification or reasons behind presenting the material in a particular way. The presenter answers the questions.

**Warm Feedback:** (2-3 minutes) Led by the facilitator, the friends point out good things that the presenter did during the presentation. They might also comment on positive ways the presenter has tried to solve a problem. The conversation is among the friends, and does not include the presenter. The presenter acts as a fly on the wall, listening in and taking notes. The recorder notes major strong points. This stage is aimed at reassuring the teacher on successes. Some examples of how warm feedback could be phrased: “I really liked the way S___ organized the class…” “In my opinion, the materials were well suited to…” “I think the presenter did a good job in…” The language is positive but impersonal, addressing the presentation, not the presenter. The friends do not address the presenter directly, in other words, they do not say, “You did that well…”
Cool Feedback: (2-3 minutes) Friends, in a conversation among themselves, give suggestions of what might have gone wrong, what might have been better and what the presenter may try for next time. The friends need to be sensitive about their language in giving this type of feedback so as not to break the bonds of friendship. The recorder makes notes on the strong points while the presenter listens actively to the feedback and takes notes. The presenter may not answer any questions or make a comment on feedback at this point, as the presenter needs to devote all his/her energy to listening and thinking about the feedback. Some examples of how to phrase cool feedback could be: “I think the presenter was asking too much of the students. S/he might have tailored materials for this group of students…” “I believe M___ might have considered…” “Perhaps the directions were not clear enough. Maybe next time the teacher could…” Again, the friends do not address the presenter directly, but remain aware that the presenter is listening.

Wrap-up (and Challenge): (2-3 minutes) The facilitator, with help from the friends, summarizes the discussion with particular reference to the presenter’s question(s) and formulates a challenge to the presenter. The presenter thanks the friends for their time and effort, comments on the most important points and/or accepts the challenge(s).

My recent research with MA TEFL students has shown that there are two key factors to making the CFC work. The first is the cultural factor that discourages overt and public criticism of a friend. Egyptians, in particular, find it difficult to give and/or receive cool feedback. Western students, and more mature students, are more apt to recognize the situational nature of the feedback and ‘accept’ it within the parameters of the protocol. The other key factor is language. The most difficult part of learning a foreign language is choosing the right words, the right tone and the right language for ‘difficult’ situations, such as giving cool feedback. Therefore, training students and modeling good language is important for successful feedback that leaves all critical friends emotionally intact. However, my research also shows that despite these ‘problems’, CFCs are extremely valuable. They help students become more critical, both of others and of themselves, and hone skills of observation, reflection and accepting challenges. CFCs help every student in the class by engaging individuals in all parts of the circle, as presenters, facilitators, recorders and friends.

Remember:
- Circles are round.
- Critical Friends bring a different perspective based on observations, judgment, evidence, analysis and insight.
- Listen more, speak less.

References for Critical Friends:
http://www.essentialschools.org/cs/cespr/view/ces_res/43
National School Reform Faculty web for articles:
http://www.nsrthereview.org/articles.html
Face-to-Face Communication and Computer Mediated Learning: Building Communities with Social Presence

Doris Jones, Department of Rhetoric and Composition

Blackboard. Lecture Capture. ScribeNotes. Turnitin.com. Wikis. Blogs. Videoblogging. Podcasts. Google Apps.(e.g. Google Talk; Google Docs; Google Reader). Ning. E-Portfolios. Horizon Wimba. Skype. Slide Share. YouTube. Online Photosharing and Annotation. The recent suspension of classes at AUC resulted in faculty and students using a variety of these teaching and learning technologies to supplement face-to-face communication. The integration of computer-mediated technologies with traditional face-to-face pedagogy is growing in higher education (Brown, 2000) as more learning takes place in a “blended” or “hybrid” instructional environment. Since the concept of blended learning is a relatively new paradigm (Garrison & Anderson, 2003), further research is required to investigate how faculty can advance best practices in instructional design using a combination of face-to-face and online learning domains. Linking students to instructors and material through technology is achieved through learner motivation (Motsching-Pitrik, 2004).

When attempts are made to attach motivation with learning material in virtual classrooms, a number of challenges and questions arise. How can faculty and their students perform their roles within and across face-to-face and online environments and in relation to each other? How can we strike a balance between desired instructional outcomes while using the best technology to aid in that effort? How can we customize pedagogical agents to catalyze collaborative, active, reflective, participatory and inquiry-based learning outcomes in face-to-face and virtual environments? The abrupt closing of the university amplifies an exigent need to engage critically with these questions to assess how we teach. Such an assessment will require professional development opportunities to assist faculty with what are in some respects complex learning instructional strategies and design techniques to foster the creation of problem solving activities, collaborative learning, peer evaluation, creativity, intellectual camaraderie, and social negotiation.

Today, as we delve into the throes of make-up classes, computer-mediated instruction is desired because of the many conflicts arising from attempts to schedule face-to-face sessions. Since motivation is integral for learning in any environment, whether the classroom is face-to-face or computer-mediated, a student’s sense of personal connection to the material catalyzes what some scholars refer to as “social presence” (Richardson & Newby,
Gunawardena (1995), defines social presence as “the degree to which a person is perceived as a ‘real person’ in mediated communication.” “Social presence” can be achieved in the web-based environment when the instructional design initiates a communicative act between stakeholders.

Such an act, according to Andrews and Haythornthwaite (2007), can allow students and faculty to see the relationship between the “author/speaker, the listener/audience, and the content of the message,” to advance learning outcomes. (See Figure 1).

In this communications model, the instructor prompts the communicative act, however, once initiated, the student must become involved to actualize the successful transfer of learning. Intrinsic to the success of such a model is the instructional design and desired learning outcomes which takes into consideration the needs of learners and what motivates them to learn. Some students are motivated by grades while others are curious about the subject matter. Another interesting characteristic about this model is while it emerges from rhetorical systems of communication, it allows all actors to participate and the dimensions of learning can evolve without any predetermined endpoints.

The Center for Learning and Teaching (CLT) has a number of teaching and learning technologies available for demonstration. CLT staff can assist faculty with the design of a pedagogical strategy to fit specific teaching goals and objectives and CLT’s Student Teaching Assistants (STAs) can provide the support needed to implement the technology. STAs are also available to assist students in the Learning Commons. CLT’s Director, Dr. Aziza Ellozy notes one of the challenges AUC faces is “how to prepare our faculty to supplement their face to face instruction with online opportunities for teaching and learning?” Some of CLT’s Educational Technology Showcase includes:

- **Lecture Capture** (digital recordings of lectures streamed over the internet)
- **Blogs, Student Journaling, Reflection** (online chronology of comments)
- **Wikis – Collaborative Writing and Editing of WebPages** (multi-dimensional collaborative center)
- **Podcasting** (audio or visual content that is automatically delivered over a network)
- **Online Multimedia Sharing and Annotation** (upload, tag, browse and annotate multimedia)

Please contact CLT for more information about the possible application of these technologies to your teaching needs.

**Sources**

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49 Lecture capture allows instructors to record digitally their lectures (in class or at home) and stream them over the internet. Students see a partitioned screen displaying the presentation materials and video feed, with navigation options. Many AUC faculty have successfully used it. Time on training is minimal.


Intelligent Redesign: A Collaborative Approach to “Scientific Thinking”
Brandon Canfield, Chemistry Department

As a multi-section Core Curriculum course required for all undergraduates of AUC, Scientific Thinking (SCI120) provides unique insight on a variety of issues faced throughout the liberal arts educational system. Scientific Thinking, part of the “Core of the Core,” is a course that many students may not choose to take. While AUC is known here and abroad as the region's premier English-language institution of higher learning, many students enter without a full appreciation for how or why that elite status depends on the liberal arts component of the education that is being offered. The instructors for this course are a mixed group of full time and adjunct faculty, loosely affiliated with backgrounds in various natural sciences, history of science, philosophy of science, mathematics, and social science. Making the most effective use of their talents and expertise, while providing a common experience relevant to the interests of all students, has been a consistent challenge throughout the history and development of Scientific Thinking.

Beginning in the Fall semester of 2004, a major redesign of the course was spearheaded by the former Dean of the School of Sciences and Engineering, Dr Fadel Assabghy, with the introduction of the General Lecture Series. This marked the first real step toward providing a common experience for all students enrolled in Scientific Thinking, across all sections. In previous semesters, students met exclusively within their individual sections which were taught by instructors left entirely to their own discretion in constructing a course syllabus and in selecting supplemental material to cover a range of topics including History of Science, Scientific Method, Science and Society, Science and Politics, Science and Ethics, and Science and Religion. Consequently, it was often the case that instructors, in absence of any formal structure, created for their students the specialty course which they may have preferred to teach, had they been given a unique course ID from their respective departments. While an understandably desirable situation for the instructors, the 400+ students divided among 14 sections were left for better or worse to share very little in their SCI120 experience.

In contrast, the General Lectures Series provides a common framework of topics for all sections to follow. Modeled in part on a similar program at Columbia University, the weekly General Lectures, attended by all sections, are presented by our most distinguished lecturers and invited experts in their fields. The foundation of the course material is thus laid in the General Lectures, and these themes and concepts are built upon in greater detail within the individual sections.

The order of topics within the series, as originally introduced, remained essentially unaltered for the next several years, revealing over time several issues with the underlying approach of the course. Much of the first half of the semester was dominated by a history of science, with a specific focus on the history of cosmology. While the purpose of this may have been to illustrate such important concepts as the development of the scientific method, paradigm shifts, and falsification, it seemed to also have an unintended effect by aggravating a feeling
of alienation from the material already felt by a number of the students upon enrolling in this required course.

By the time the students were presented with material which they could directly relate to themselves and to their personal realities, many had already dismissed the course as being entirely irrelevant. Rather than gaining an appreciation for the process of science and critical thinking, or for the reliable evidence they allow us to gather and the advances that will continue to be made in our understanding of the natural world, many students were understandably left with a strong sense that science is nothing more than a series of mistakes and falsified ideas. It was with this in mind that the structure of the course was recently reexamined and ultimately redesigned in a collaborative effort led by then-Coordinator, Dr. Kathryn Lawrence.

The results of the redesign have been significant for a number of reasons involving both the students and the faculty. The vast majority of the content and material presented in class remains unchanged, however the structure and organization have been dramatically altered. The concepts of science and scientific thinking are now first related to the self and later extend outward into the natural world and to the more abstract. This is in contrast to the previous thematic organization of “Big to Small” (i.e. cosmos to atoms), in which the relevant self was lost without focus somewhere in the middle. This new approach allows students to make immediate personal connections with the presented material and increases the level of active engagement required in order to understand and appreciate the more abstract concepts that are eventually presented when addressing two seemingly straightforward questions: “Who are we?” and “Where are we?”

Several of the topics covered, such as global climate change, evolution, and the “Big Bang”, elicit strong emotional response in the students, but by keeping the overall focus on the self, it is easier for all students, including those who would prefer not to be taking the course or those who remain intellectually hostile towards the material, to express themselves and to incorporate logic, rationalism, and empiricism into their thinking. The topics simply become the vehicles to introduce and reinforce these concepts, and the students' passion provides them with more reason to assess their positions empirically, and to construct more rational arguments based on reliable evidence. These students are ultimately in a better position to appreciate the processes by which science moves forward.

On the faculty side, the collaborative nature of the redesign has also allowed for more personal investment in the course. While electronic wikis have been utilized by Scientific Thinking instructors for several years, serving passively as shared repositories of course material, links, and other resources, the redesign presented an opportunity to take greater advantage of the interactive technology, in which users actively commented and advised on changes to the developing course outline. Additionally, weekly instructors' workshops have been implemented as a means to introduce and review proposed new material, and provide a person-to-person accountability check on the methods and materials utilized by the various instructors: by presenting and defending these methods to the other instructors, the ongoing refinement of the course is allowed to continue as a truly collaborative effort. Although
instructors retain a high level of classroom autonomy, the awareness of the precise differences between the sections increases the cohesion of the course, providing a more uniform experience for all students.

Much like science itself, Scientific Thinking will continue to develop and progress as a course at AUC. By keeping it dynamic and collaborative, the instructors are fostering the best possible environment for that to occur.
Dear Colleague: Are You Aware of Self-Plagiarism in Academic Publications?

Mohamed Nagib Abou-Zeid, Professor of Construction Engineering

In mid-October, I attended the Annual Conference on Academic Integrity that was held at George Washington University in St. Louis, Missouri. The highlights of this conference included the continuing journey of all academic institutions to foster academic integrity practices and to raise awareness among the entire community. It may be of interest as well to realize that most recent studies reveal that plagiarism is not on the rise since means to detect and combat it are perhaps more effective and the academic community is more alert to its negative implications. AUC had a strong and active presence in this event and a paper was presented entitled “Academic Integrity and Plagiarism: Be Prepared”. The paper addressed how Academic Integrity Standards can be genuinely met and how to prepare for the accreditation process within the scope of academic integrity.

One of the highlights of this conference was a highly interactive session on Self-Plagiarism in Academic Publication that was led by Tracy Betrag, School of Management at the University of South Australia which I attended as well as other Members of the Advisory Council of the Center for Academic Integrity. I thought that this issue has not received enough attention in the past and truly needs a closer look. As we are all aware, we live in a highly competitive environment and academics is no exception. Hence, faculty - particularly junior faculty - are keen to publish as much as they can in reputable journals and conferences following the motto “Publish or Perish”. Self Plagiarism is a term that refers to multiple re-use of text or other academic content of one’s own previous papers without proper citation. The issue manifests itself when such content becomes part of several publications for which the author receives credit or which are used towards promotion or hiring. Other somewhat similar terms used are “textural re-use”, “multiple submissions”, “content recycling” and “republication”.

Defining self-plagiarism as opposed to textual re-use is not an easy task and the following questions are raised:

- Do the vast majority of authors cite their own work when resubmitted in a new publication?
- Are there some means to regulate multiple submissions to conferences and journals before feedback is received? While some journals regulate that, others do not seem to pay enough attention.
- What is the limit, if it can be quantified, of content re-use from a previous paper beyond which a paper is to be rejected?
- Should a faculty member that has ten (for example) original publications receive the same credit as a peer who has ten publications, some of which have overlapping content?
• Well, while you may have a definitive answer to some of these questions when considering your own discipline, the same answer may not apply to other disciplines. Against this, the discussion resolved to the following outcome:

• The academic community has to pay a closer attention to self-plagiarism and raise awareness among faculty and research teams particularly within their discipline.

• Quantifying self plagiarism by content is a complex issue as publications contain text, tables, graphs and other supporting materials. Yet, some borderlines need to be drawn for each discipline.

• It was argued that if more than one-third of a paper is from one’s previous publication, it should be considered as self-plagiarism unless cited. The paper should be rejected and some actions ought to be taken. An exception lies in review papers, provided that they are properly cited.

• Regardless of the percent allowed for re-use from a previous publication, it seems that there is a consent that this “tolerated” percent should be less if it lies within what is claimed to be the core of the paper, outcome or contribution. This is not the case for background information once properly cited.

• Conference committees, publishers and journal reviewers need to clarify and announce their policy on re-use of previously published materials and its originality.

Dear Colleague, I realize that I may have left you with many questions unanswered and that many other opinions and policies may apply to your domain. It is an attempt from my side to share with you some of the international concerns on self-plagiarism on one hand and invite you, your colleagues and students in your department to give this issue more serious consideration.
Using Classroom-Based Technologies to Engage Students and Promote Learning

Carol Clark, English Language Institute

“The mind is not a vessel to be filled but a fire to be kindled.” –Plutarch

What uses of technologies help you to learn in your classes at AUC? What uses of technology hinder you or dampen your motivation to learn? When I asked these questions of two AUC students, Basma Rady and Nourhan Hassan, in a recent CLT workshop, their responses were similar to those of their counterparts in U.S. universities (Meacham, 2007; Kvavik, 2005 quoted in Garrison & Vaughan, 2008). Among the answers were that they learned “when the professor uses the PowerPoint, but in an interactive way,” e.g., giving alternative explanations and responding to students’ questions, comments, and performance. The students also find video clips helpful if they are kept short and simple, i.e., with a slow enough delivery for students to understand and a clear message that brings the lesson to life but does not need a lot of explanation by the instructor. What hinders learning for AUC students and those in the U.S is when the PowerPoint (or any other technological mode) becomes the lesson, with little or no interaction between students and instructor or explanation in a different way from what is already on the slides (Bowen, 2006 and Felder and Felder, 2006). In addition, when every word that the instructor uses in class is also written on a slide, students have a hard time to follow due to the density of the message, and this dampens the student’s enthusiasm for the subject (Felder and Brent, 2009).

When designing lessons and courses to promote learning, it is helpful to focus on two things: the student and how to engage him or her in the subject at hand. Twenty-first century students experience technology in many facets of their lives and expect it in their classes, yet they favor a “blended” approach, consisting of “the organic integration of thoughtfully selected and complementary face-to-face and online approaches and technologies” (Garrison & Vaughn, 2008). The use of learning technologies in the classroom represents a powerful way to engage students, and there is much for an instructor to master, but even with very little experience, it is easy to introduce technological elements in limited parts of the lesson, practice, and add to one’s collection and repertoire. The following are three key ways to employ the computer technologies and data shows available to us in classrooms at AUC.

Using PowerPoint presentations to focus information and create atmosphere. PowerPoint presentations have certain artistic features that can serve as an artist’s palette for the designer/teacher and as a way of bringing images into a class to capture students’ attention, arouse their curiosity, illustrate a point, and/or check whether they have prepared for the class. Images quickly and easily demonstrate key words and concepts, allusions, and metaphors that students may be unfamiliar with in their readings. For the visual learner, images enhance understanding and provide motivation to learn more. In addition to images, titles and bullet points focus the lesson and give it shape and logical sequencing. Prepared questions save time; key quotes from thinkers and from student work spark discussion and inspire them, and links to the Internet or other Multimedia sources provide a change of focus and pace within the lesson. The advantage of this tool is that after using it, one has it as a record of each class.
PowerPoints can be saved and stored easily, tweaked, and reused again whenever necessary. They can also be posted on Blackboard for students to use in reviewing for tests or as models in creating their own presentations. The teacher can also take photographs of the stages of a complex class project (such as in Community-Based Learning), incorporate those photos into a PowerPoint, and share it with the class as a memento. This type of presentation also serves to illustrate the process to the next class to undertake such a project or task.

However, the PowerPoints should serve only as a tool and stimulus for learning. They may be, and often should be, abandoned if student questions evoke a face-to-face discussion or alternative explanations in class that serve the same learning purpose. If vital points are left out of one class, they can easily be cut and pasted into a PowerPoint for the next one. Be sure that all slides are clear (with at least 32-point font and good light/dark contrast between text and background) and concise (using phrases, not sentences, and no more than 5 or 6 words per line), and show simplicity over complexity, which needs discussion and explanation.

Engaging students with multimedia websites. Our Internet connectivity with data shows enables us today to bring the world into our classrooms as never before. From quick film clips from YouTube featuring the authors of texts you are teaching to interactive websites that allow students to guess what Stone Age tools were used for and check their answers, the Web is a treasure trove of engaging sites. You can collect these on Blackboard for you and your students to access each time you teach the course.

Encouraging creativity with student productions. When technology is used effectively by the instructor, students are interested in producing their own PowerPoints, multimedia videos, photographs, and other learning products. Giving oral presentations in pairs or groups using PowerPoint (often modeled on, and sometimes surpassing, those used by the teacher) encourages students to actively participate and express themselves in creative and individualized ways that promote learning. Their products can easily be published on Blackboard.

The time we have with our students is always limited, so we also need to engage them in arenas outside the classroom, such as on Blackboard or by creating assignments that challenge them to interact with their readings and with other people as they learn. However, the major arena of learning over which we as instructors and professors have the most control is the arena of the classroom, and the combination of human interaction with the technologies available to us therein can give us the means to kindle the fires of learning in our students and in ourselves.

Sources:
E-Content: Student Content Creators: Convergence of Literacies

Joan K. Lippincott, Associate Executive Director of the Coalition for Networked Information (CNI).

There is ample evidence that students are creating all types of digital content and disseminating it via the Internet. When they graduate from universities and colleges and enter such fields as business, education, government, medicine, research, or the arts, they will continue to produce digital content. Employers often select new graduates for positions in the expectation that they will take on technology-intensive assignments related to the Web presence of the organization. While in school, many students create digital materials without guidance from faculty, information technologists, or librarians, but such products are typically recreational and do not have the hallmarks of academic work. This is not to say that producing academic-quality work in the Internet environment is impossible or beyond our current understandings. Some faculty use digital media in creative and compelling ways to publish and disseminate research in their disciplines. However, few academic programs have identified the preparation of students to be digital authors as a desired outcome of their studies.

Higher education needs a new framework for promoting the value of information and technology skills for undergraduate and graduate students. This new focus should speak in a language that resonates with academic administrators, faculty, and students and deemphasizes the jargon of information professionals. Many librarians and information technologists believe that acquiring information and technology literacy skills is an important part of a college student’s education. However, despite reports and standards from groups such as the National Academies and the Association of College & Research Libraries (ACRL), few institutions have implemented information or technology literacy educational components throughout the curriculum.

So, what perspective might resonate with academic administrators, faculty, and students? I suggest using a framework that focuses on higher education’s need to prepare students to be content creators within their disciplinary or professional specialties. Delineating the skills that students need in order to create content within the disciplinary context could be a more meaningful way of encouraging the integration of a wide variety of skills into the curriculum. A student who creates an advertising spot for a business communications class may need a variety of skills: getting background information about a company, product, industry, and target audience; developing a script using compelling language; locating visuals and being

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50 This article was adapted from Lippincott, Joan K. “Student Content Creators: Convergence of Literacies.” EDUCAUSE Review, 42(6), 2007, pp. 16-17.


52 A well-known example is the Valley of the Shadow Project, highlighting Civil War primary source material and developed at the University of Virginia by Edward L. Ayers: <http://valley.vcdh.virginia.edu/>. Many examples of digital creativity in scholarship are evident in Vectors: Journal of Culture and Technology in a Dynamic Vernacular, produced at the University of Southern California School of Cinema & Television: <http://www.vectorsjournal.org/>.

aware of the intellectual property restrictions that are involved; using a video-camera and editing software; and understanding how to make an impact on an audience using video as the medium. Ideally, a convergence of literacies—written, information, technology, new media/visual—in the digital, multimedia products will result from such work.

Many faculty would acknowledge the need for students to acquire information and technology skills, even if they do not explicitly build these skills into their own courses. However, another aspect of literacy, media literacy, is generally less understood or accepted by faculty. Elizabeth Daley and her colleagues at the Institute for Multimedia Literacy at the Annenberg Center at the University of Southern California believe that “those who are truly literate in the twenty-first century will be those who learn to both read and write the multimedia language of the screen.”54 They offer coursework that helps students attain, for work in digital media, analytic skills that are similar in scope and depth to those developed by literature students. As part of a major initiative of the MacArthur Foundation, Henry Jenkins and his colleagues have described a range of skills needed by pre-college students. They state that new media literacies, research skills, and technical skills must now accompany the development of written skills.55 Jenkins and his coauthors emphasize that new media literacies should be thought of in addition to, not as replacements for, written literacy.

If it is already difficult to implement information and technology literacy programs on campus, how can we develop a coordinated, discipline-oriented literacies program? I don’t think information professionals can “solve” this problem. However, they can serve as catalysts in initiating discussions about these issues in faculty groups such as the faculty senate, the general education committee, or departmental curriculum committees. They can demonstrate the value that information professionals can add by helping to identify relevant skills, assisting with the design of assignments to incorporate those skills, suggesting rubrics for the assessment of multimedia assignments, developing learning objects, and/or participating directly in instruction. Whereas information professionals can do this with faculty on an individual basis, ideally they would work with programs, departments, and colleges.

In the way that we produce content today, it is difficult to separate out where media literacy ends and where technology literacy begins—or where information literacy begins and where technology literacy ends. There is a convergence of literacies, and they can all inform academic work in separate but integrated ways. It is time to frame the discussion of literacies in the context of academic work products rather than in the context of organizational structures (e.g., library, computing, English department, media department). Faculty and professionals from a variety of areas could collaborate to develop experiences that can be embedded in the curriculum to assist graduates in becoming sophisticated digital-content producers in their professional lives. This is most certainly a twenty-first-century challenge for higher education.

E-portfolios: a New Initiative at AUC

Dr. Aziza Ellozy, Director, Center for Learning and Teaching
Associate Dean for Learning Technologies

"An e-portfolio is a purposeful aggregation of digital items - ideas, evidence, reflections, feedback etc, which 'presents' a selected audience with evidence of a person's learning and/or ability." Sutherland and Powell (2007)

A little over a year ago, I wrote a piece in this newsletter entitled “Reflections on assessment, rubrics and e-portfolios” (New Chalk Talk, Volume 8, Issue 6), where I made the argument that we should adopt e-portfolios for students if we wanted to assess and document learning. The argument was made in part in the context of AUC’s recent push for institutional assessment and accountability of student learning, a requirement that is now expected of all institutions of higher education. This suggestion was also made in the context of a recommendation put forth to us by the Middle States Commission on Higher Education where the adoption of “course” portfolios was specifically mentioned.

I am happy to say that, as of this semester, several departments and programs have pushed for the adoption of e-portfolios and are piloting the “Epsilen” platform recently acquired by AUC. The initiative is supported by the collaborative effort of the CLT, UACT and the IR office. The departments/programs in question - Architectural Engineering, the Graduate School of Education, the department of Journalism and Mass Communication, and the First-Year Experience (FYE) Program - will be requiring that all their students keep an e-portfolio during the course of their study within the major or, as in the case of the FYE, during the length of the program.

When designed properly these portfolios let students assess and showcase their learning according to specific criteria. The Epsilen e-portfolio allows for this type of record keeping. The agreement with the licensing company is such that students, faculty and alumni can own their portfolios for life as long as they have their AUC email account (even if AUC decides to terminate the Epsilen license).

At present the stakeholders participating in the pilot are, for the most part, motivated by the accreditation process (the FYE program is the exception). But program or school accreditations are not the only reason to promote e-portfolio adoption.

As Helen Barrett (known as the e-portfolio “guru”) reminds us, e-portfolios have “two faces”: the e-portfolio as product/showcase and the e-portfolio as process/workspace. The table on the next page is a simplified version of Barrett’s “Balancing the two faces of e-portfolios”. Each “face” has different purposes: the former is for accountability or employment and the latter is for learning and reflection.
In summary, e-portfolios allow students to provide employers or graduate school admissions with examples of their work, to keep a record of their credentials, to get instructor feedback and to reflect and engage in their learning over time.

In the months to come, I and other e-portfolio advocates will be writing, presenting and launching a campus-wide conversation about this important initiative for our students and our programs.

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<th>THE TWO FACES OF E-PORTFOLIOS</th>
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<td>A. Portfolio as PROCESS/workspace</td>
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<td><strong>Primary purpose</strong></td>
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Today however, I would like to encourage faculty, especially young tenure-track faculty, to think about adopting e-portfolios for their own professional growth. In last week’s AUC planning forum on hiring and retaining quality faculty, the need for mentoring tenure-track faculty was brought up among many other teaching/research related issues. In my opinion, e-portfolios would be the most appropriate and powerful way for them to track, keep record and showcase their work at AUC. They would then be used in the promotion and tenure process.

In addition, keeping a teaching portfolio may be the answer to the present dissatisfaction of faculty with student evaluations as the sole criteria for evaluating teaching. Portfolios would provide a more authentic evidence of teaching. Finally, I urge faculty not to be intimidated by yet another e-tool: one-on-one support for you or your students is available through the Student Technology Assistants (STAs) at the CLT and in the Library Learning Commons, whereas CLT and UACT staff will work with you to plan and customize the needs of your students, course, program, or project.

**Sources:**
The Value of a Teaching and Learning Center
Mary Deane Sorcinelli, Associate Provost for Faculty Development, Professor of Educational Policy, Research, and Administration

One of the most pressing issues in higher education is that of student learning – how to improve, measure, and ensure it. Parents, government officials, and business leaders are demanding that colleges and universities educate their students better, and many institutions have responded by establishing teaching and learning centers. These centers have emphasized the centrality of student learning and have offered support to faculty to become the most effective teachers possible. During the last decade, there has been tremendous growth in centers across the globe: the best private and public research universities have created them, and new centers are burgeoning in comprehensive universities, small liberal arts colleges, and community colleges. The teaching and learning center is a concept whose time has arrived (Cook and Sorcinelli, 2002).

In the spring of 2009, I was invited to the American University in Cairo’s Center for Learning and Teaching (CLT) as a visiting scholar. As both a faculty member and academic leader with over twenty-five years of experience in faculty development in the United States and around the world, I had founded two centers at major American research universities and paid visits to countless others. My experience at Egypt’s first university teaching center was exceptional. I discovered that CLT is a “jewel in the crown,” of the campus, Egypt, and the region. Moreover, the CLT offers innovative best practices to which teaching centers in Australia, Canada, Europe, and the U.S. can look for inspiration.

The value of a learning and teaching center has been well documented (Cook and Sorcinelli, 2002; Eble & McKeachie, 1985). An effective teaching center addresses the needs and interests of the entire academic community in support of the education of students; advances “leading-edge” issues in teaching, learning, and faculty development; highlights and disseminates instructional innovations; fosters collegial dialogue within and across disciplines and career stages; builds an ethos of feedback and assessment that is viewed as supportive, not evaluative; informs professional preparation and practice based on scholarship; and is key to creating a campus culture that values and rewards teaching.

The CLT has distinguished itself as an excellent example of what we hope for and expect of all centers. It very intentionally welcomes all faculty; generously shares state-of-the-art teaching strategies with colleagues in and across departments; and facilitates conversations about, and explorations of, teaching and learning campus-wide. Its professional staff offers a comprehensive program of services to reach faculty with varied interests and needs. These include individual consultations and midterm student feedback; seminars and workshops on teaching methods and issues; and linkages with other units such as the library, academic computing, and classroom technologies and media services to stimulate teaching improvements.
But what I believe sets CLT apart from many centers is its forward-looking focus on the most urgent challenges in improving student learning: the need to engage in learner-centered teaching; to integrate technology inside and outside of the classroom, and to emphasize assessment of student learning outcomes. These issues were identified in a major study of the field of faculty development in higher education as three of the top challenges confronting faculty members and the most important issues to address through faculty development services and activities (Sorcinelli, Austin, Eddy, & Beach, 2006).

**Emphasizing Learner-Centered Teaching**

For many faculty members who are accustomed to lecturing while students listen, learner-centered teaching may require new and unfamiliar teaching skills and may raise fears about lack of coverage of content or less control over assessment activities. Learner-centered teaching, however, allows students to do more learning tasks, such as summarizing discussions, and encourages them to learn more from and with each other. Teachers, on the other hand, can do more of the design work and provide more frequent feedback to students. CLT regularly convenes successful teachers to share a large repertoire of active learning strategies upon which their colleagues can draw. This is accomplished through CLT’s annual faculty development fall and spring institutes and its ongoing workshops on topics such as student-led discussions, team learning, peer learning, oral presentations, writing-to-learn activities, case studies, and study groups. Its biweekly newsletter, “New Chalk Talk,” and website also offer both basic and cutting-edge information on learner-centered teaching strategies.

**Integrating Technology into Teaching and Learning**

Integrating technology into traditional teaching and learning calls upon faculty to use new methods to help students acquire content knowledge, develop problem-solving skills, participate in learning communities, and use digital information sources. When considering technology in teaching and learning, one immediate issue faculty members face is what tools—PowerPoint, email, the internet, course management systems—might best serve their student-learning goals. But the successful integration of technology is more complex, entailing the careful consideration of course content, the capabilities of various technology tools, student access to and comfort with technology, and the instructor’s view of his or her role in the teaching and learning process. CLT is cutting-edge in its focus on the kinds of support and training required to thoughtfully integrate technology into the classroom. It has been particularly creative in its piloting of emerging learning technologies that actively engage students, such as clickers, blogs, wiki’s, and podcasting. It has created a successful student technology assistance program, provided training to help instructors improve their pedagogy in smart classrooms, and supported the development of technology-enhanced instructional materials and course redesign activities.

**Emphasizing Assessment of Student Learning Outcomes**

Assessment is an ongoing process aimed at understanding and improving student learning. It involves deciding what students should be learning, making expectations explicit, systematically gathering and analyzing student assignments to determine what students actually are learning, and using the resulting evidence to make pedagogical improvements. There are a number of teaching resources that can help faculty members develop a better
understanding of the learning process in their own classrooms and assess the impact of their teaching. Since its inception, CLT has featured classroom assessment techniques (e.g., the minute paper) and advice on how to adapt and administer these techniques, analyze the data, and implement improvements in teaching and learning practices. CLT also has been on the forefront of the creative use of formative assessment activities including offering mid-semester feedback on instruction via Clickers and WebCT as well as through focus groups or papers.

**Conclusion**

As we enter the 21st century, researchers and practitioners have identified key areas that are driving change and shaping the future of faculty development. Central is the impact of a changing paradigm for teaching and learning—learner-centered teaching, learning technologies, and course-based assessment. Centers for teaching and learning are a key strategic lever for responding to change, assisting faculty in their efforts to grow, and enhancing institutional quality. Congratulations to CLT for encouraging faculty to create the future of teaching and learning.

**Sources:**


Learning Outcomes: Why Do We Need Them?

Dr. Pandeli Glavanis, Associate Director, Center for Learning and Teaching

Continuous evaluation and assessment of courses, programs, degrees and even entire academic institutions is part of the course in modern educational systems. A key component of this process is learning outcomes and as such they have been seen by many academics as belonging to the realm of “obligatory” activities that we all need to engage with in order to receive the much-valued accreditation. Thus, academics in general express a degree of disdain when asked to either clarify them or even more so when told they have to use them. Learning is still seen in many institutions of higher education as part of a “mystical” process that takes place within the hallowed environment of the academy and not a discreetly quantifiable activity that can be paraded to outsiders and even internal committees for them to be assured that we the faculty are doing our jobs well. In short, learning outcomes have not received a very good press. Faculty, do engage with them, but albeit reluctantly.

It is, of course, beyond the scope of a short essay, to try and correct, what I firmly believe is a serious misconception, or for that matter to seek to identify the reasons behind the misconception. The latter, in particular, is definitely worthy of serious debate as it resides firmly within the broader landscape of what is learning and how does it happen. It is the age-old terrain within which numerous debates, related to the cognitive process of how critical thinking is enhanced, have taken place. There are those that still advocate the didactic approach and those that see self-learning and critical thinking as being enhanced by “facilitators” rather than teachers. Learning outcomes are a key component in this debate even if academic managers have now appropriated them for purposes of assessment and accreditation. In other words, I would argue that learning outcomes preceded current systems of assessment and accreditation and derive primarily from the long-standing debate of what is the best teaching strategy that does enhance critical thinking, and thus learning. Let me explain.

First, let us clarify what learning outcomes are not, as this is one of the key misconceptions held by many faculty. They are not a description of the content or the syllabus of a learning unit (course, module, or even program and degree). Neither are they what faculty intends to do or convey in such a learning unit. Furthermore, they are not to be confused and/or identified with learning objectives which are also highly valued components of a learning unit. Objectives set out in unambiguous terms the content that is to be integrated into the learning process and thus the generic skills, knowledge and understanding that the student needs to achieve and possess by the end of a learning unit. For example, at the end of a metallurgy learning unit, a student needs to be cognizant of the fact that different metals also exemplify different properties and how these differences can be used in the process of constructing an edifice, a bridge, etc. Similarly, at the end of a language learning unit, a student needs to demonstrate ability to write grammatically correct sentences and make use of a certain pre-defined level of vocabulary. Learning outcomes, on the other hand, focus primarily on the learner and identify the cognitive
and experiential capabilities needed in order to achieve the learning objectives. Thus, for example, they highlight the critical thinking skills as well as generic skills needed by the learner in order to grasp both cognitively the chemistry of different metals as well their potential use in construction (i.e. applications).

It is in this respect that learning outcomes achieve their educational and learning significance for both faculty and learners. Furthermore, it is in this area that the exciting and interactive process of learning takes place. For faculty, for example, identifying learning outcomes is the foundation stone on which the learning unit syllabus, content, objectives, assessment and teaching strategy (methodology) are defined. Let me explain.

**Content / Syllabus:** if faculty requires a certain type of cognitive skill to be acquired then they also need to provide the content which will enable learners to understand such knowledge. For example, it is not sufficient to provide content which identifies and lists the different properties of metals and how these can be used in different types of construction. It is also necessary to provide content that spells out in some detail the chemistry of these different metals as well as to how this can be changed in order to meet the requirements of different types of construction. In other words, it is the difference between rote memory learning of properties and their concomitant application and critical thinking learning which enables a transformation of properties and thus, a variety of alternative applications. The latter, of course is a higher level of learning and requires a different form of engagement of the learner with different types of content; chemistry.

**Learning Objectives:** if faculty requires learners to be able to demonstrate ability in how different metals can have their properties transformed in order to meet different and/or innovative requirements in applications, then the objectives set will differ significantly from a learning unit where learners are only expected to demonstrate ability of how to make use of different metals in pre-defined forms of construction.

**Assessment and Evaluation:** if faculty requires learners to demonstrate abilities in higher levels of cognitive knowledge then they will also have to devise assessment tasks that reflect this. For example, in the case of a metallurgy learning unit they would also have to give learners tasks that involve the chemistry of metals and how these can be transformed in order to be used in certain types of applications. This, of course, is not required if the learning outcome is the simple application of certain metals, whose properties are already given and known, for the construction of certain pre-defined objects.

**Teaching Strategy / Methodology:** if faculty requires learners to demonstrate higher levels of cognitive skills (critical thinking), indicated above, then assessment tasks and learning activities will differ significantly than those requiring simple applications of knowledge.

The above highlights the fact that it is the learning outcomes that ultimately determine the learning unit’s design, content, syllabus and teaching strategy. In effect, the learning outcomes “telegraph” to the learners and academic managers the qualitative differences in learning between learning units and thus also enable intellectual progression and academic
standards to become both transparent and measurable. Furthermore, the specific derived hierarchy of cognitive skills and their concomitant generic application skills also enable learners to assess their own knowledge and capabilities. They enable learners to set targets and identify strategies of how to meet such targets. Thus, for example, some learners may wish to achieve the basic target of constructing via the use of materials whose properties are already known. Other learners, however, may wish to develop the skills of how to transform the properties of materials in order to meet the ever changing requirements of modern living. Learners will identify which learning unit they will take through a careful understanding of learning outcomes and not learning unit objectives.

Learning outcomes, therefore, are and should be seen as being the intellectual foundation stone on which learning units are developed and designed. They are, in my view, the most exciting and challenging element of teaching and in effect the most dynamic and interactive dimension of learning. Their appropriation by academic managers for assessment and accreditation should not detract from their generic value as a key element in the learning process. For both faculty and learners they are also the mechanism by which knowledge and/or generic skills are developed and transformed and thus the progress of episteme is assured.

Sources:
The Pedagogy of Community-Based Learning: Do students learn?
Dr. Pandeli Glavanis, Associate Director, Center for Learning and Teaching

I never teach my pupils; I only attempt to provide the conditions in which they can learn. (Albert Einstein)
There are two types of education: One should teach us how to make a living and the other should teach us how to live. (John Adams)

In many respects the two quotes above exemplify two of the core issues in modern pedagogy and especially those related to active learning and teaching methodologies that highlight critical thinking. Einstein’s quote underscores the role of the professor as the facilitator which in turn enhances student-led learning and thus critical thinking. On the other hand Adams highlights the very critical dimension of education; namely that it is also a tool to be used in daily life and not just abstract theory for “ivory tower” academia. Thus, the two quotes combined also exemplify the philosophy of community-based learning which is at one and the same time an interactive and dynamic teaching strategy as well as a process of enhancing civic qualities among our students. In other words for university students to absorb critical thinking as a learning process as well as learn how to be citizens, students must act as citizens and faculty should attempt to provide the context within which this can happen; the community. Therefore, higher education must connect subject matter with the places where students live and the issues that affect us all. Nevertheless, universities appear to have failed to recognize the benefits of student engagement with their communities in acquiring knowledge. Thus, this short essay will explore some of the issues related to the pedagogic and academic benefits to be derived from such teaching strategies and make use of examples from my own teaching at AUC in order to contribute to the debate.
The whole art of teaching is only the art of awakening the natural curiosity of young minds for the purpose of satisfying it afterwards. (Anatole France)

Teaching “development studies” at AUC presents a unique challenge in that both students and faculty consider and discuss daily in class what we all experience in our civic lives by virtue of just living in Cairo; a global city exemplifying an urban environment which incorporates practically every aspect of development theory and praxis. In this respect the environment itself - Cairo – accomplishes the first part of France’s dictum and it is up to faculty to formulate strategies that will make the best use of it in order to achieve the second element. In doing so we also engage with modern pedagogy which following extensive research notes that “the focus is changing and must change from teaching to learning; from outer-directed, "expert"-driven curriculum and methodologies to more learner-centered, experience-based, connected ways of acquiring the knowledge, skills, and attitudes required for life in the world in which we now live and the rapidly changing world in which our young people will live and work (Poulsen 1994, p. 2). Thus, I proceeded to develop my own teaching strategy accordingly and a syllabus that would reflect it. Let me elaborate.
At a conference Zeke Zellerman (Association of Experiential Learning) noted that there are three critical elements in developing a syllabus which will make us of community-based learning as

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a teaching strategy: framing (planning), the activity itself, and reflection (Dukehart 1994). These became my own guiding principles and accordingly the courses I teach are developed around them.

**Framing (planning):** The clearer the framing the more the students will get from the experience and thus we work as a partnership of three: the community-based organization, the student and myself. We set the goals, objectives, methodology and highlight the expected learning outcomes for the students; which are also of benefit to the community-based organization. For example, a comprehensive “grant proposal” for an NGO assisting children with basic learning disabilities in poor districts of Cairo, managing waste disposal in Ain El-Sira (Cairo) in order to enhance environmental quality, enhanced dissemination of information in a particular poor district of Cairo so as to reduce non-compliance in taking the medicine that can eradicate “Lymphatic Filariasis” which affects 2.5 million Egyptians annually, etc. Thus, students contribute and learn at one and the same time.

**Activity itself:** Invariably involves field-work where students work closely with the respective community-based organization and carry out specifically designated tasks such as surveys, focus groups, etc. that will enable them to produce the final product that will be given to the organization and also be incorporated in their final class assignment. To ensure that field-work is structured, students are expected to make short progress presentations to the class and at each stage and also show how “development theory” has been integrated in their practical work and informed their development praxis.

**Reflection:** This can also be referred to as a de-briefing of what was learned at the end of the fieldwork phase and is done in class with a representative of the community-based organization in attendance. Here students highlight what went right, wrong and the unexpected, lessons learned and suggestions for improvement. The discussion also engages the organization representative and the other students. The students then proceed to write this up as an academic term paper, with appropriate and relevant theory, and it is submitted as their final assignment. Invariably students perform to a high level and assignments are worth reading!

It should also be noted that this process is also constructed on the foundation of extensive cognitive research which notes “that intelligence and expertise are built out of interaction with the environment, not in isolation from it. This research shows that effective learning engages both head and hand and requires both knowing and doing.” In fact, Berryman and Bailey (1992) note in their classic book on cognitive research that "passive, fragmented, and decontextualized instruction organized around generating right answers adds up to ineffective learning” (p. 68). Furthermore, the sociology of learning also informs us that “learning involves reproducing the real-world environment for learning. It involves active communication with expert practitioners, intrinsic motivation for learning, cooperative learning, and competitive learning to compare the processes developed by various learners to create a product”. (Owens & Wang, 1996: 10)

Thus, we can now answer in the affirmative the title question and in fact move beyond and note that community-based learning also contributes to critical thinking and student-based
learning. **So why do so many faculty shy away from it?** First, it is generally assumed that it is due to the sanctity of the “content” which so many educators see as paramount and thus community-based learning is seen as detracting from that priority. In fact, however, such faculty do not only fail to see the benefits to be derived from students applying what is learned in the classroom to real life situations, but there is also a “hidden agenda”; the element of time involved in preparing for community-based learning to be integrated into the syllabus.

*Community-based learning requires time, effort, and expense. Time is needed to allow faculty to work individually with students in identifying and planning learning objectives, in arranging for involvement of community sites, and in helping students reflect on their experiences. Other practical considerations include liability coverage for times when students are outside the school building, transportation issues, and the need to schedule blocks of time so as to allow students sufficient time to get to and from their learning sites as well as to become active there. Orientation and training of both educators and community mentors are also essential. (Owens & Wang, 1996: 12)*

Nevertheless, and despite the effort required, pedagogic research has shown that community-based learning produces such benefits for students and the community that surpass whatever difficulties of time and effort may be involved. As educators we owe it to our students to explore and make use of what facilitates learning, critical thinking and prepare them for their future careers in the real world. To avoid this and seek refuge in the “ivory tower” of academia is to fail in our primary role as educators and also to fail in the trust our students and their parents place upon us. Community-based learning has been shown by extensive pedagogic research to exemplify what is best in the process of learning. Not to make of use of it in our curricula, syllabi and classrooms is to negate our primary role as educators.

**Sources:**


Reflective Practices in Learning and Learning Transfer

Dr. Adham Ramadan, Associate Professor, Chemistry Department

I was very much inspired by the recent contributions to New Chalk Talk from Ryan Derby-Talbot (volume 7, issues 9 and 10) concerning reflective practices in teaching and learning. Indeed, reflective practices can very much enhance the learning process not only because they could assist in assimilating, using and transferring information and knowledge gained, but more importantly, help the learner be aware of these processes. However, students' perception of the value of reflective practices in their learning is not always positive. This is primarily due, in my opinion, to the general conditioning of students, during schooling, to consider learning solely as information gain and retention.

Subjecting students to a learning paradigm shift, where the process of understanding and applying concepts, and the way to do this, are equally, if not more important than the gain of information, is a challenging task. It not only requires students to develop skills very different from ones they know and use for gaining and retaining information, but it also contradicts their perception of what "learning" is.

In Chemistry, learning generally occurs as a result of three processes: (1) the acquisition of principles and concepts, representing information gain and retention, (2) the ability to interpret and predict observations using the acquired information, and (3) the ability to carry out quantitative calculations. In this respect, reflective practices would be associated with processes (2) and (3).

Having taught one group of students in three courses (100, 200 and 300 level) over a period of three years, I have had the opportunity to observe the evolution of their perception of reflective practices. More importantly, I have found that these mirrored the transferability, from one course to the other, of skills and learning practices.

In the 100-level course, students expected to be passive recipients of knowledge. They anticipated the delivery of course concepts and principles together with the outcome of applying these to typical observations. In addition, they expected to be coached in the application of this information to quantitative problem solving using a limited number of templates. However, the course was conducted differently: students, through the use of concept tests56 were urged to work out for themselves the application of gained principles and concepts to observations. Reluctant at first, they took to this activity, eventually identifying it as one which most helped them learn57. The application of gained information to solve numerical problems however remained a challenge throughout the course. Training students on solving typical problems using a limited number of templates would have been counterproductive. It would merely have allowed students to "reproduce standard answers" rather than "create answers to problems", as Derby-Talbot very effectively expressed it. This would subsequently very much limit the transfer of numerical problem solving skills beyond the course. An emphasis was therefore placed on the process of problem analysis and on the identification of the different possible solution methods. This was not what students expected, and they demonstrated a persistent resistance to it.

56 These were first used in 1989 by Eric Mazur, Physics Professor at Harvard University, in teaching Newtonian Mechanics in his introductory physics class. The acclaim to their effectiveness rapidly spread, and now they are used in various disciplines as a tool for "peer instruction".

57 Small Group Instructional Diagnosis carried out by the Center for Learning and Teaching for the 100-level chemistry course.
At the end of the semester, students commented about insufficient "traditional" coaching in problem solving.

Two semesters later, I had a number of these students in a 200-level course, entailing principles and concepts not covered in any prior courses, together with qualitative applications, and significant problem solving skills. Throughout the course, the application of gained information to observations ran smoothly. Moreover, students' perception of their skills in this regard was positive. On the other hand, quantitative problem solving skills were still in need of consolidation. This was recognized by the students, who, however, failed to realize that this resulted from their limited ability to analyze problems and "create answers". They still envisaged improvement in problem solving as dependent on solving large numbers of problems using a limited number of templates. To address this, problem analysis was further emphasized. This was carried out by abstracting, as much as possible, the application of the concept(s)/principle(s) of concern to the problem(s) at hand and using this to develop general conceptual methodologies for problem solving. This did reflect in minor but noticeable improvement in quantitative problem solving. However, students' perception of improvement did not match their expectations: at the end of the course, students were still not fully convinced of this approach, with comments reflecting an apprehension to the limited class time spent on "traditional" problem solving techniques.

I had the same students again in a 300-level course, where concepts and principles were more complex, their application to interpreting observations less straightforward, and problem solving more complex in analysis, but relatively simple in answers once the analysis was carried out successfully. Again, the application of information gained to qualitative interpretations of observations was carried out by students with little difficulty. However, quantitative problem solving skills still lagged behind, though to a lesser extent than in the 200-level course. Abstract analysis of course concepts and principles with regards to methods and limitations of application to quantitative problem solving was therefore carried out, with students being requested to extend this to assigned problems and examples as part of the solution. Initially, students found this challenging, but with continued engagement, and one-on-one follow up on my behalf (made possible by a small class size), they steadily improved in their performance. Very importantly they gradually became aware of the reason behind this improvement, and not only started valuing it, but became drawn into the process, growing enthusiastic (as much as one can get!) about problem solving.

On the one hand, reflecting on this group of students and the development of their learning skills over three years, it is clear that reflective practices are conducive to learning transfer. When students became aware of the gain/improvement of a skill, and the reasons behind this, the skill had a higher transferability to other courses. In this respect, the qualitative application of concepts and principles to the interpretation of observations transferred from the 100-level course, whereas quantitative problem solving lagged till the 300-level course. On the other hand, undergoing a reflective activity myself about this process has assisted me in identifying how reflective practices can promote learning transfer. In this regard, I plan to revisit the design of course work for a number of my courses in order to more effectively incorporate reflective practices.
Most of us know what “experiential learning” is: learning by self-consciously and reflectively doing. Virtually all of us believe that it is important to supplement the transfer of information through classroom lectures and discussions with “hands-on “exercises that require our students to practice new skills and test new attitudes, approaches and ways of thinking. Whether we have our students conducting experiments in a lab, crafting business development strategies for clients, developing policy positions for the Model United Nations conferences, or performing on stage, we expect them to absorb knowledge at least in part through trial and error, through practice, through reflection and self-analysis.

Interestingly, however, as instructors, we tend not to reveal, much less reflect on, the “hands-on” processes by which we accumulated the knowledge and skill that gives us the authority to teach in the first place. Partly as a result, it is probably fair to say that to most students, their instructors are shadowy figures, existing only in discrete times and places—the classroom, the lab, the rehearsal studio, perhaps the Cilantro coffee line or the parking lot—but otherwise we are non-existent, or at least mysterious. (Speaking for myself, I was eleven years old before I realized that my teachers had given names, much less homes and families, and to this day I know virtually nothing of the outside classroom activities of my erstwhile university professors!)

Our students may consider us approachable or formal, amusing or intimidating, but very few of them are curious enough—or impertinent enough—to consider how we came to be in front of their classrooms. The path that brought us here—literally and figuratively, whether a bus from Heliopolis or a PhD from the University of Kansas—is virtually invisible to the students. And most of us are comfortable with that circumstance. We worked hard to acquire our authority and we expect it to be acknowledged without a great deal of reflection, on their part or ours; we neither anticipate, nor welcome, having to rehearse it.

Yet the challenge of moving to the new campus this semester has required AUC faculty to exhibit and perform many of the qualities of mind and character we foster in our students. This semester, largely unintentionally and usually unselfconsciously, at least at the outset, faculty across the campus have been showing students how to learn. We have been, in other words, demonstrating—very openly—our more or less well-honed skills at acquiring and assessing information (finding elusive bus schedules and determining their reliability), testing hypotheses (scarce parking spaces will produce competitive parking lots), collaborating in problem-solving (developing new uses of “found” spaces).

For many of us, this has been a deeply disconcerting experience. We are accustomed to being knowledgeable, expert, respected and reliable. We have deliberately narrowed our domain of active learning to a very specialized arena of scholarship and scientific research and for the rest; we are used to being authorities in the eyes of our colleagues and our students. Being unable to answer even the simplest of their questions (no, we did not know where the classroom was many of us did not even know where our office was!) undermined our self-confidence and—we worried—weakened our students’ confidence in us.

Yet we were, in fact, illustrating, by our very actions, how people learn. We exhibited all the varied styles of learning—some of us enjoyed the challenge and some were deeply frustrated, some of us demonstrated that we are independent learners and some prefer to work in groups.
Some of us are “print-driven” and learn by reading (checking the university website and looking for signs); others learn by listening (gleaning information from hallway conversations and quick mobile phone calls).

And, whether we liked it or not—and many of us did not—we performed learning for our students. One of the truly remarkable—and, it is fair to say, completely unanticipated—features of the move to the new campus has been the extent to which the faculty has displayed, indeed laid bare, the process of learning. The demands imposed by the move have elicited from the faculty an unwonted resourcefulness, and evoked the spirit of inquiry, the curiosity and ingenuity which made them scholars and scientists in the first place.

In doing so, the faculty of AUC have given the students one of the most valuable lessons they will ever get: that the skills that make a good learner—the abilities to acquire and assess information, to weigh and analyze competing propositions, to work collaboratively to solve problems—will serve them well long after they have left school. Particularly when rules change and the standard operating procedures are suspended—in other words, particularly in the twenty-first century—the ability to efficiently gather and weigh information, to analyze situations and solve problems will be far more useful and important than vast stores of static and often quickly obsolete information. And this the faculty demonstrated in “real-time,” when their professional pride was at stake.

This “teaching by doing” became genuinely exciting—real “experiential teaching”—when it became reflexive, when we began to think about what we were doing. In some ways, this began even before the move itself, with the research on faculty responses to the very prospect of the new campus and as I write faculty in Sociology, Anthropology and Psychology are examining our responses to our new environment. More spontaneously, faculty are engaging in thoughtful reflection about this semester’s enterprise. In response to a provostial exhortation to try to "cover the curriculum [you] intended to offer at the beginning of the semester" in the face of the disruptions of the move, for example, one faculty member begged to differ, saying I could talk faster, be less open to discussions in class, deny questions altogether. We can fill the students’ schedules and fill the weekends with labs and lectures. But things need to settle, people need to reflect what they learned, time to conduct literature research, time to go out and do term projects, and time to do their assignments…. Yes, we should offer to give the students more content, offer classes (labs/seminars) for them to take if they wish to do so. It is their right to receive the education they paid for and need. But we cannot and should not make it mandatory.

I am not sure I agree. I am never sure students know what they need to know and what is in their best interests but perhaps that is my own customary deference to the authority of my colleagues. I am completely sure in any event, however, that this reflection, this iterative and simultaneous real-time, experiential teaching and learning, is extraordinary.

I was proud to be associated with AUC and its faculty long before I knew exactly how fortunate I would be. I hope that some measure of the self-consciousness and reflection about what we do that was born in the crucible of the move outlasts those trials. It is certainly worth hoping that the spirit of flexibility and openness fostered by the challenges of acclimating to the new campus will be sustained long after we settle into our customary routines. If that is so, we will have learned—and taught—more than any classroom could ever encompass.
The View From Behind the Reference Desk

Michael Chromey, Reference/Instruction Librarian

As a Reference/Instruction Librarian for the Main Library of The American University in Cairo (AUC) it is part of my professional duties to not only stay abreast of the latest developments in reference service delivery, but also to teach patrons, both students and faculty, the skills necessary to effectively access resources in today’s increasingly complex information environment. The AUC has made a strong commitment to ensuring that students possess the research skills necessary to succeed as scholars and professionals by requiring all undergraduates to complete a semester-long course in library information literacy (LALT 101). However, the university does not currently expect faculty to take a course or attend workshops in information literacy for pedagogical needs. In my humble opinion, this can create a significant disconnect between increasingly technologically savvy students and faculty who may be employing the same research techniques they acquired during graduate school and who expect their students to adhere to these, at times, out dated research strategies. The following “real-life” Reference Desk encounters help to illustrate this point.

Encounter #1:

Student: “My professor requested that I find two scholarly articles on robotics.”

Reference Librarian: “Great. We subscribe to a variety of online journals dealing with robotics research. I would suggest you start by searching the International Journal of Robotics Research, which can be accessed through the Library’s E-Journal Finder tool on the AUC Library homepage.”

Student: “Unfortunately, I can’t use any articles found online. My professor requested that the articles come from a print journal. He wants the original article.”

First, the “original format” for any print journal is an electronic file (Word document, etc.). All print journals are print copies of electronic files. The online version of any journal article is in the “original format.” Second, the overwhelming majority of the most recent research, especially in business or science, is increasingly published exclusively in electronic format. Therefore, a professor who limits a student to the print format actually separates the student from the most recent and relevant research available. Additionally, the Library has made a concerted effort to replace print journals with the electronic equivalent in order to increase access and delivery options.

Finally, it seems that some faculty are not aware of the difference between web-published “open” information and subscription databases and online journals that are delivered via the Internet. The AUC Library pays substantial sums of money to provide our patrons with access to a variety of scholarly journals that are delivered online. As we all know, the information contained in a scholarly journal article published online and available solely via subscription differs greatly in quality from the information published by an amateur robotics aficionado on his personal blog. In short, it is the quality of the content that differentiates the two and not the format or method of delivery.
Encounter #2:

Student: “My professor asked that I find some background and statistical information on the African Development Bank Group.”

Reference Librarian: [Goes to Wikipedia to find an entry on the African Development Bank to develop a context for answering the reference question. Finds that Wikipedia has URLs for the African Development Bank home page, the Bank Information Center and other relevant primary sources]. (Tells the Student), “If you navigate to the Wikipedia entry for the African Development Bank, you can find a nice background article on the history and function of the bank as well as valuable links to the Bank’s homepage and reports on the Bank’s performance from other banking agencies.”

Student: “Unfortunately, my professor stated that we couldn’t use information from Wikipedia or the Web.”

In the above scenario, the professor’s prohibition against Wikipedia or other web 2.0 resources may be grounded in a belief that online information resources are significantly less accurate that the information found in traditional print resources. This is not the case and several recent studies have shown that online encyclopedias are as accurate, and in certain instances more accurate, than their print counterparts.58 With this in mind, it would not be appropriate for a student to only use information gathered from Wikipedia articles to write a research paper on the history of the African Development Bank just as it would not be appropriate for a student to only use information gathered solely from articles in the print edition of New Encyclopaedia Britannica to write a paper on the same topic. Wikipedia and other online tools are valid “pathfinders” to more relevant and comprehensive information.

Furthermore, issues of currency and relevancy are more easily addressed in online encyclopedias due to the fact that they can be updated almost instantly. For instance, the content and quality of the Wikipedia entry for “Kosovo” is more accurate and current than the New Encyclopaedia Britannica print version published in early 2007.

In conclusion, I fully understand that the pressures of teaching, publishing, and other professional pursuits may severely restrict the opportunities faculty have to receive instruction on the latest developments in information delivery and scholarly communication. As a Librarian, I do not expect faculty to become “information professionals,” for that is my job. However, there exists a need to bridge the widening gap between the information skills possessed by today’s average undergraduate student and the faculty who instruct them. By staying abreast of general trends in scholarly communication, faculty can be better prepared to assist students who will have to conduct future research in this new information reality. Librarians and teaching faculty can all agree that it is the success of our students that matters most and we should do everything in our power to ensure that they have the knowledge and research skills necessary for the world of tomorrow.

Reflections on Assessment, Rubrics and E-portfolios

Dr. Aziza Ellozy, Director, Center for Learning and Teaching
Associate Dean for Learning Technologies

“There is little that can be measured with any degree of certainty.” (Fryshman, 2008)

A few months ago I read an interesting and provocative article entitled “Do we assess learning? Pull up a chair…” (Fryshman, 2008) which criticized the way institutional assessment of learning was carried out in undergraduate education.

In that article, the author argues that assessment of learning is so complex because of the many variables it entails, and that making any kind of (institutional) generalization is missing the point.

“Learning outcomes are not numbers. We simply can’t assimilate all the variables …without papering over most of the things that really matter”.

In short, he sums up by stating:

"Every individual coming in has so complex a series of characteristics, and emerges after so many different activities and variables, that any comparison or generalization is meaningless. Sometimes, when large enough numbers of students from similar enough backgrounds travel through a narrow program that is relatively unchanging, one can reach some general conclusions. But only on a discipline by discipline basis — anything broader brings to bear so many different variables as to make assigning a numerical value to student learning outcomes an exercise in futility."

The author was sufficiently provocative as to evoke a response from Dr. Terrel Rhodes, currently the Vice President of the Office of Quality, Curriculum and Assessment at the Association of American Colleges and Universities (AAC&U).

Responding with an online comment, Dr. Rhodes starts off by saluting Fryshman for “thinking through the reasons for why many common assessment approaches to student learning are not useful, especially most of the measures that campuses are currently being urged to adopt” and for recognizing that assessment should be grounded on the individual student (my emphasis). But he also adds that we “do not have a choice to NOT assess student learning”.

So what are we to do? According to Rhodes, the answer lies in collecting individual student course work as well as co-curricular activities/work in e-portfolios (or portfolios). In these e-portfolios, learning would be assessed according to rubrics based on the expectations of the faculty. As a matter of fact, the AAC&U59, he says "are engaged in a pilot project60 with faculty and campuses across the country in developing an assessment process that relies upon" such portfolios.

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59 AAC&U’s “VALUE” project, VALUE: Valid Assessment of Learning in Undergraduate Education at http://www.aacu.org/value/index.cfm

60 A term derived from the Latin “rubrica” (which means “red ochre”) originally indicating a word or a section of a text that was highlighted in red for emphasis. It then developed to mean the notes that a teacher penned in red ink while grading a paper, and today it refers to a grading guide.
This then brings us to the subject of rubrics and e-portfolios at AUC.

Rubrics generally mean a scoring guide that explains to students the criteria by which they will be evaluated. They have become very valuable tools especially since assessment of student learning has become a hot issue in education.

With AUC’s emphasis on a campus-wide systemic approach to assessment, encouraging evidence of student learning has become a priority, and many AUC faculty are now developing and using rubrics for various types of assignments.

Unfortunately AUC falls behind when it comes to implementing a comprehensive approach to portfolio adoption. These portfolios would allow students to show multiple examples of their work in all their courses and would offer a view of development over time, i.e. they would track student progress and curricular effectiveness across a multi-year program. Portfolio assessments offer a powerful solution, and as Dr Rhodes suggests, they allow “for individuals to be the units of analysis” which “can be aggregated to inform programmatic or institutional needs.”

The advent of web-based e-portfolio systems has the potential of assessing both student and programmatic success. However, making the case for e-portfolios will have to be the topic of another New Chalk Talk issue.

**Sources:**


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61 If you have not attended this week’s CLT workshop on “Designing Rubrics” by Ann Boudinot Amin (Director of Assessment), we encourage you to do so next semester.

62 Adapted from Carmel McNaught’s presentation WEBIST-2006 conference by A. Ellozy
Grading or Assessing Learning? Seasonal Thoughts for Reflection!

Pandeli Glavanis (PhD), Associate Director, Center for Learning and Teaching

The examination period is upon us. Students are anxious and faculty contemplate the “burden” of marking! The Registrar prepares to receive the grades and all students graduating or otherwise are calculating their respective GPAs and seeking to improve them. All this activity takes place at the end of each semester on each and every university campus the world over. What is its purpose and why do we give it pride of place in academia? In what sense if any does it relate to the primary objective of academic institutions, namely learning? Does the GPA or the letter grade awarded to a student reflect learning or for that matter any form of objective assessment and/or evaluation of what a student gained in terms of the other key objectives of higher education: critical thinking, self-learning skills, ability to work in groups, understanding key issues in a particular discipline, etc.? Current pedagogic research argues forcefully that the answer is a clear “NO”. So why do we keep on doing it and devoting so much time and energy on the part of both students, faculty and administrators? The answer is simple:

Although faculty may find grading too subjective and difficult to justify, our students “worship” the grade! Furthermore, and possibly of even greater importance, employers seek graduates with high GPAs! Graduate schools rely heavily on GPAs and SATs. Parents, who pay fees or otherwise, await anxiously the end of semester grades of their respective offspring’s and the list can go on… Grading has constituted a cornerstone of academic assessment for decades.

Nevertheless, no single system has gained universal acceptance and both faculty and universities are continuously experimenting with alternatives. Educational research continues to explore and ponder ways in which faculty can improve the way they telescope a variety of assessments during an entire semester into a letter grade or number. Similar research questions whether such an enterprise is at all possible or fruitful. In fact a number of reputable liberal-arts colleges in the U.S. either do not issue grades at all or de-emphasize them. In all cases, the rationale is that grades often do not provide a clear picture of academic aptitude or of potential for success, and that learning, not achieving the highest score, should be the goal of a liberal education. (Wikipedia)

Furthermore, and irrespective of what took place during the semester in the classroom, faculty and students Part Company at the end of the semester and become “antagonists”. Faculty see examinations as part of a process of learning. For students, examinations themselves are the process. Faculty see the need to award a letter grade as a necessary chore required by the institution. Students, on the other hand, perceive grades as the sole and key indicator reflecting all of their accomplishments during a semester of learning. Faculty see grading as an “objective” assessment of student performance during the semester. Students see the grade clinically and ascribe all failings to the “sadistic” nature of faculty. The list of conflicting and opposing perceptions held by faculty and students with regard to the grade and the grading process can be as long as a piece of string! Thus, once again, we ask ourselves
why do we engage in such an activity? The answer, again, is simple: educational institutions, faculty and administrators continue to confuse grading with assessment.

Assessment of student performance does not and should not place value or judgment upon it. Assessment is simply a reporting of a student’s profile of achievements. Assessment is in fact akin to a baseball or soccer card that lists the batting average, the goals scored, runs batted in, penalties saved, without placing a value on the performance. In order to place value and/or evaluate performance we need to engage in a very different exercise. We need to consider if the player is a rookie, if the player played in a first or third division league, etc. In other words a low batting average may in fact be a highly valued average if we consider the player is a rookie. Thus, the wider context within which performance is evaluated needs to be incorporated in our final decision to attribute a letter grade (value).

As such it becomes very clear to all that grading and assessment are very different species and each have their own and very distinctive pedigrees. Examinations are forms of assessment while what we report to the Registrar is grades. Thus, we need to ask ourselves: what is it that enables us to translate academic and scholarly performance during a semester into a value judgment? What additional considerations and criteria do we take into account in order to avoid spurious value judgments that reflect our own biases rather than some degree of objective value system? The answers, of course, are very complex and numerous. Different disciplines and even different departments will have their own internal and agreed upon rubrics or “understandings” that enable them to award grades that mean something in that discipline or department. The analogy with the rookie and the batting average is critical here. How do we evaluate (value) a batting average of .280 for a rookie? It may be low as batting averages go, but may in fact be more than sufficient for a major league team to sign that player. It is the context within which value is attributed that is critical for all of us to make sense of grades.

In conclusion, therefore, this is but one small attempt to appeal for a reform of the way in which we attribute grades at the end of each semester and thus remove both the anxiety and the antagonisms that emerge at this time of the year. Let us consider, for example, ways in which letter grades can be accompanied by discipline-based or department-based rubrics and narratives that enable students, their parents and fellow faculty members in other departments and/or schools to make sense of this mystique laden letter grade and GPA.
If learning is a Social Process, Where Does Web 2.0 Fit In?

Aziza Ellozy, Director, Center for Learning and Teaching
Associate Dean for Learning Technologies

The first time I heard a lecture on Web 2.0 was in April 2006 at a “WEBIST” conference in Portugal. At the time, I don’t think I quite understood what this new phase of the web meant, except that it was a collection of software that allowed for collaborative publishing. The speaker kept talking about the “user” having taken over the web and creating online content.

Today, the term “2.0” has caught on like fire: Learning 2.0, Teaching 2.0, Business 2.0, Enterprise 2.0; PR 2.0, Media 2.0, Classroom 2.0, Campus 2.0 etc. While I will not go into the etymology of the term, suffice it to say that the phrase "Web 2.0" describes a significant transition in the use of the Internet as it went from a global “information” space to a more “social”, “collaborative” and “participatory” space. Users have taken over and are “creating” content, collaborating, communicating and forming professional and social networks like never before.

What has made this possible? It is the emergence of a number of Web-based services and applications which are collectively called “social software” (blogs, wikis, social bookmarking sites, RSS feeds, social network sites like Facebook, media sites like YouTube and Flickr, etc) whose main characteristic is that they are user friendly and that many of them are free.

“In Web 2.0, the software recedes into the background…it has to be very easy to use because the slightest hurdle may cause the user to abandon it for something else” (Vassileva, 199-214)

This means that online content can be created by anybody without the specialized skills once needed to create a webpage. Users have been transformed into consumers and producers of web content.

As individuals, many of us have kept up with and are adopting some of these new technologies for our personal use. Even AUC has embraced “podcasting” and “YouTube” as the software of choice to disseminate AUC activities to the outside world, and has made available applications like “Google docs” and “Google sites” (a wiki application) for the AUC community to use.

The questions I am posing here focus on the implications of this technological shift for education: Has education kept up with this shift? Should it? In what way does it help facilitate learning? What are the challenges and what are the opportunities?

If you have followed the discourse taking place in educational circles or in our CLT workshops/meetings, it is clear that a significant shift has occurred in the teaching and learning landscape. The following table briefly summarizes this change.

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63 For a background to this newsletter please refer to A. Ellozy’s "Better Thinkers, Better Futures" (1). What Research Tells Us. New Chalk Talk, Vol.7, Issue 1 found at http://www.aucegypt.edu/academic/clt/NewsletterV7.htm
Our role as teachers, however, still remains the same: we are there to guide the learning experience and to facilitate the students’ relationship with the discipline. And yet, we need to rethink how we do it, because what has worked in the past may no longer be helpful. Most university courses and curricula are designed based on learning theories of the 1900-1960’s and are essentially content-driven, lecture-based and teacher-centered. Our biggest challenge today is designing courses that are truly student-centered, that take into account the challenges of a globalized, information-centered world and that address the needs of a generation of students that has grown up in a digital environment (the so-called Net Gen students).

So does Web 2.0 fit in all of this? The answer is “yes” with the usual caveat: like any other technology, the use of Web 2.0 technologies should be driven by specific learning goals. My friend and colleague, Pandeli Glavanis often quotes Emile Durkheim (“The social power of ideas stems from their development through the interaction of many minds”) to emphasize that learning is a social process. If nothing else, Web 2.0 applications allow for this “interaction of many minds”. They are the tools of choice to help learners connect, communicate and collaborate.

A growing number of college instructors are discovering that these tools provide innovative teaching and learning opportunities that mirror current approaches to learning. The challenge is figuring out how to incorporate these paradigm-altering technologies to achieve the outcomes we seek. If this is something that interests you, sign up for CLT’s Web 2.0 crash course and join the discourse.

Sources


Better Research Assignments

Joan Petit, Instruction/Reference Librarian

Faculty often are frustrated by students’ research papers. The solution may lie in their own hands: the design of the assignment itself.

We all know the problems with students’ research papers. Students turn in papers with improper sources. Or they have good sources but use the material poorly. Or they use the internet when a research database would have been better. Or they start their research so late that they only had time to find the first three barely relevant articles. Or perhaps they don’t have enough citations from the right kinds of sources. In a nutshell: bad research, bad citations, and bad papers.

Students don’t enjoy the research process any more than faculty enjoy the resultant papers. Researchers in the United States recently asked a range of college students, "What one word sums up how you feel at the moment you receive a course-related research assignment?" In response, students offered the following: "angst, tired, dread, fear, anxious, annoyed, stressed, disgusted, intrigued, excited, confused, and overwhelmed" (Head and Eisenberg).

Students are overwhelmed. They lack context. Even when they want to do their research properly, they lack the skills and knowledge to do so—which is why they go to the internet and especially to Wikipedia, which gives them the context and overview they desperately need (Head and Eisenberg).

But why are students researching so poorly? Well, part of the problem is that faculty are so good at their jobs. Gloria Leckie defines faculty as being the very model of expert researchers: “The model requires a long process of acculturation, an in-depth knowledge of the discipline, awareness of important scholars working in particular areas, participation in a system of informal scholarly communication, and a view of research as a non-sequential, non-linear process with a large degree of ambiguity and serendipity. The expert researcher is relatively independent, and has developed his or her own personal information-seeking strategies” (202).

How is this a problem? Well, students are none of this. Many students don’t know that faculty conduct research or understand that scholars in different disciplines approach research differently. They may not know that faculty publish their work, nor do they understand the peer review process. They don’t know who is important in different fields. They may not know the word citation; never mind how to follow a citation trail. They have never attended a scholarly conference. They don’t know faculty interact with other faculty at other schools. Because of “their level of cognitive development, ambiguity and non-linearity may be quite threatening. They do not think in terms of an information-seeking strategy, but rather in terms of a coping strategy. Research is conceptualized as a fuzzy, library-based activity which is required of them to complete their coursework” (Leckie 202).

So it seems that faculty and students agree that students’ research needs help. But what’s the solution? Leckie argues that research paper assignments are "flawed from beginning to end"
and "students are doomed to failure" (201). The solution, then, begins with the research assignment itself.

She argues that instructors should “integrate information-seeking and evaluative skills into the course content” with the following six steps, each part done by the class at once as short assignments:

1. Narrowing the topic
2. Understanding and using the scholarly literature
3. Demystifying scholarly research
4. Finding and using the scholarly literature
5. Understanding legitimate shortcuts
6. Developing a strategy for the completion of the research paper. (206)

In a nutshell, the best papers come from research assignments that emphasize individual tasks and resources as much as the topics themselves. While this process requires precious class time, the resulting papers are (almost) always remarkably better. Problematic research assignments are those that include scavenger hunts; those that require scholarly resources when good quality popular sources would be more appropriate; and those that require students to use a complex research database not demonstrated in class. We also recommend faculty first complete the assignment themselves, which may uncover problem areas such as missing, outdated, or discarded sources.

Librarians are glad to help with this process. Please send us your assignment if you would like our feedback. We’re familiar with our library’s collections and often can anticipate the problems students will have. Also, please send a copy of your final assignment to the library. We’ll keep it in a folder at the Help Desk to refer to when students approach us for help.

Sources:


Understanding © and Educational Fair Use at AUC

Jayme Spencer, Senior Librarian & Director of Public Services

Back in the day, copyright was an issue that turned on the presence of the © of the material proposed for usage, the numbers of pages one could copy from a book or a journal, and the permissions needed to reproduce visual images. Today’s information-rich environment with not only print but digital formats has made these areas even less easy to determine. According to one scholar the challenge posed by the digital and network realities is a threat to copyright laws, both in the United States and around the world. (Neale, 12)

In a recent CLT workshop on copyright, participants focused on specific questions about designing course materials, tests, and text books for publication. They wanted to know just how much they could copy from authentic materials before needing to give attribution or seek permission for use. These are reasonable questions with no exact answer – it depends on a variety of factors. Before examining some of those factors, I’d like to address the question of why AUC should pay attention to copyright, especially US copyright.

“The core mission of colleges and universities is to create and distribute knowledge in order to enrich and improve the lives of individuals and to strengthen society. Intellectual property law has become a major factor in how we are able to conduct that mission.” (McPherson, 4) That AUC is incorporated in the US, thus subject to US Copyright laws is another major factor. In addition, Egypt signed the Berne Convention in 1975 guaranteeing protection of international copyrights. In 1995, Egypt signed TRIPS: The Agreement on Trade Related Aspects of Intellectual Property Rights (IPR) that expended protection to patents, computer programs, databases, trade-marks, designs and promoted protection of IPR. The US copyright law has two major sections that concern educational institutions directly – section 107 and section 108. These are the sections that have supported our academic work in classrooms, labs and libraries for years.

Section 17 U.S.C. §107 define four factors that determine fair use within the educational setting:

- The purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- The nature of the copyrighted work;
- The amount and substantiality of the portion used in relation to the copyrighted work as a whole;
- The effect of the use upon the potential market for or value of the copyrighted work.

Working with these definitions, many organizations and institutions have devised charts to help educators determine if their proposed usage fits a fair use definition. Many examples may be found of these charts by Googling “fair use chart”. One that I particularly like has been developed by the Copyright Management Center, IUPUI with a series of choices either
favoring or opposing fair use. Using this chart as an example, let’s consider the amount of the material you want to reproduce.

### AMOUNT

**Favoring Fair Use**  
- Small quantity work used
- Portion used is not central or significant to work to entire work or "heart of the work"
- Amount is appropriate for favored educational purpose

**Opposing Fair Use**  
- Large portion or whole
- Portion used is central to entire work or "heart of the work"


Instead of calculating a certain percentage, you are asked to use your judgment as to the importance of the material. It should be remembered that this judgment would be influenced by answers on all four sections, not only one.

Another chart I recommend that you look at when making these decisions is from the Association of Research Libraries. This chart looks at exhibiting materials in a live classroom, posting materials to an online class, distributing readings, and creating electronic reserves. It distinguishes between where one is allowed to copy and where one must link only. Again, these are only guidelines. Do note the copyright information on this publication: *This chart is © 2007 Association of Research Libraries (ARL) and is available for your re-use under a Creative Commons Attribution-NonCommercial 2.5 License (creativecommons.org/licenses/by-nc/2.5/)*. Often, by checking at the bottom of a webpage or clicking on an icon or link to the home institution you can easily determine the conditions of usage. Graphics are also often labeled with information concerning their usage.

When the intention is to build a textbook with an eye for publication, the instructor must be careful to secure permission for any material he/she has not specifically authored. This can be a time-consuming operation and may lead to rejection by the copyright holder.

Several years ago, Libraries and Learning Technologies wrote a guideline for copyright compliance for all units within the School. These may be found on the LLT Webpage. The Main Library and the RBSCL post the guidelines for photocopying and printing from the databases at all the print/photocopy stations. The Center for Learning and Teaching uses the guidelines to train Student Technology Assistants in handling copyright issues.

Many universities have established offices to advise and educate faculty, students and staff on these issues. A few excellent examples are Columbia University, University of Texas at Austin, University of Indiana, Purdue University, Indianapolis, and Brigham Young University. All of these have a version of a copyright clearance or management or advisory office which supports academic work in this realm by helping to determine the need for copyright clearance and to seek permission when needed. Here at AUC, we need to at least agree within schools, if not campus wide, on ways to make these decisions. An important document I would recommend to all interested parties to read is *Campus Copyright Rights and Responsibilities: A Basic Guide to Policy Considerations*. This paper was produced...
by representatives of the Association of American Universities, the Association of Research Libraries, the Association of American University Presses and the Association of American Publishers to help colleges and universities navigate copyright issues. It presents information on copyright law and how it applies to traditional published works, digital materials, educational materials produced on campus, and library usage of copyrighted material. Perhaps it is time to consider the establishment of such a center on the AUC campus that could define and promote copyright compliance and IPR issues for faculty, students and staff.

For useful resources and guidelines on copyright issues please consult CLT’s website page at the following URL.

http://www.aucegypt.edu/academics/llt/clt/TeachingEnhancement/Pages/CopyrightGuidelines.aspx

Sources


“Better Thinkers, Better Futures” (1)
What Research Tells Us
Dr. Aziza Ellozy, Director, Center for Learning and Teaching

“Better thinkers…”, this is what an AUC education promises to deliver. Yet “thinking” is an outcome we do not often assess. We assess content learning, we assess student satisfaction and we spend a lot of effort evaluating teaching. We collect data on students’ perceptions of how much “critical thinking” has been emphasized by their instructor, but ask them what critical thinking is and their answers would be mostly speculative. We do not however assess the intellectual development of our students as the final outcome of an AUC education.

I do NOT propose to embark on such an endeavor. I am not aware that this is an outcome that we can assess at the university level or for that matter at the curricular level, but I would like to start a conversation about how to help our students develop their higher order thinking skills. Numerous studies (Perry, 1970; King and Kitchener, 1994; Baxter Magolda, 1992) have shown that the intellectual development of adults occurs in “stages” and that there are different levels of thinking. These studies have also shown that the development of complex cognitive skills does not occur automatically as we grow older and that it needs a supportive environment in which students are explicitly taught to become “better thinkers”. A successful education therefore would be one which helps students attain higher levels of thinking.

So how applicable are these studies to our setting at AUC and how can we teach to elicit higher order thinking?

Most students entering AUC come from a culture where working hard and memorizing information is rewarded with success. They rely on “authority” (their instructors, the textbooks, notes etc) to guide them through the process. They know the rules of the game and what to expect if they stick to them. They then come to a place where (if we do it properly) they are suddenly confronted with rules that have shifted considerably and where the emphasis on thinking “critically” and “independently” may catch them unprepared. This may frustrate them and we in turn are frustrated that they are not what we wish them to be. This is especially true with freshmen and sophomore students. I hear continuously instructors complaining that students are not what they “used” to be, that they cannot think properly, that they are spoon fed and that it is very difficult to change these habits. And yet our job is to turn this around.

I contend that if we are to truly help them develop intellectually we need to make use of what research tells us about how to address this question. We may also be surprised to find out that, like their counterparts in the U.S, they may not be cognitively prepared to tackle what we sometimes expect of them.

For the purpose of this discourse, I propose to use the results of Harvard psychologist William Perry’s groundbreaking study of the 1960’s. Although this study is dated and involves only Harvard male students, it is one of the most influential models of intellectual
development and is the paradigm for subsequent equally influential models such as King and Kitchener's "Reflective Judgment Model", and Belenky’s Women's Ways of Knowing. The most important outcome of these studies is the realization that students go through intellectual developmental stages and that most of those entering college are NOT ready for higher order thinking.

Perry’s study found that students exhibit nine developmental stages divided into four broad categories, from the less complex to the more complex stages. These categories and the characteristics of students within them can be summarized in the following table:

In the next New Chalk Talk issues, we will be examining these stages with an eye on recognizing them in our students and on exploring how to help them move on to higher thinking levels.

<table>
<thead>
<tr>
<th>Dualism</th>
<th>Multiplicity</th>
<th>Contextual Relativism</th>
<th>Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(stage 1)</td>
<td>(stage 2, 3 and 4)</td>
<td>(stage 5)</td>
<td>(stage 7, 8 &amp; 9)</td>
</tr>
</tbody>
</table>

Dualistic thinkers believe in the existence of right or wrong answers and these answers are known to “Authorities”. There are NO gray areas.

Students realize that some important questions/problems do not have right or wrong answers. Everybody has a right to their own opinion.

Students recognize that not all solutions/approaches to a problem are equally valid. Knowledge is perceived as contextual and reliability of information needs to be evaluated.

Students make choices, commitments (career, values, politics, personal relationship) integrating knowledge, personal experience and reflection (made in the awareness of relativism). Students realize that commitment is an ongoing stage with continuous possibility of growth/change.

Sources:


“Better Thinkers, Better Futures” (2)  
The Perry Model: Dualism

Dr Aziza Ellozy, Director, Center for Learning and Teaching

The very first time I walked in class to teach “Scientific Thinking”, I asked my students what they had heard about the course. One of the students responded that he heard that everything we learn in science turns out to be eventually false. His body language indicated that this was certainly not a good thing, and that “Scientific Thinking” may be a waste of time. Two semesters later in another class, after we had discussed Popper’s falsification theory, (i.e. that a scientific hypothesis has to be falsifiable and that no amount of experimentation can prove a scientific theory to be “true”) another student made the remark that since science is always “changing” and that what we know today will be proven wrong tomorrow, then we have to rely on our religion to find the answers we look for (it was said, if I remember correctly, in the context of a situation where one is faced with conflicting arguments).

These are representative of the kind of thinking that Perry has classified as the “dualistic” stage. **Dualistic thinking is characterized by the certainty that there are right or wrong answers/solutions to every problem and that these answers/solutions are known to “authorities”.** The “good” instructor is seen as one of these authorities who helps them find, or provides them with, the “right” answers, even to open ended problems that do not have absolutely correct answers. He/she is the source of knowledge and is therefore expected to convey the facts.

In addition, W. Pierce (1998) recognizes in all of us hidden psychological barriers to clear thinking such as ego defenses and/or “enculturation” (i.e. “the process of acquiring the basic beliefs and values of one’s culture”).

We should therefore not be surprised when students entering college feel uncomfortable when confronted with ideas or perspectives that challenge their cherished beliefs and/or their sense of identity. The student whose religious upbringing prepares him/her to think that science and religion are incompatible may be uncomfortable with the notion that “absolute” truth does not have a place in science. When push comes to shove, he/she will retreat to the security of belief be it cultural, religious, or political. When prodded to search for different perspectives, the realization that several “authorities” are in conflict adds to the uneasiness.

**So how do we help students move away from dualistic thinking to Perry’s “multiplicity” stage?**

Kloss (1994), who has found Perry’s scheme very helpful, has devised pedagogical strategies to help university students become critical thinkers. For students who think in dualistic ways his recommendations include the following:

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• Provide examples that deal with conflicting points of view
• Create an environment that encourages different viewpoints and that accepts them as legitimate
• Reinforce the unlikelihood of one potential solution, approach, or viewpoint to complex problems
• Support the legitimacy of students’ point of view
• Ask for reasonable and substantive justification for assumptions and value judgments
• Challenge overgeneralizations and appeal to authority
• All the while, provide for a safe environment where students feel they can take risks.

It is useful to point out that sometimes when confronted with more complex ways of thinking, students sometimes retreat or escape to the comfort and security of authority. The transition is difficult and does not happen in a moment of illumination. In Kloss’ words, “a nudge is better than a shove in these matters”.

Sources:

“Better Thinkers, Better Futures” (3)  
The Perry Model (cont’d)  
Dr Aziza Ellozy, Director, Center for Learning and Teaching

Welcome back everyone! This promises to be an especially exciting year as we prepare for our move to the New Campus next fall. I would like to extend a special welcome to our new faculty and to our first group of post-docs.

This issue continues with the theme that we started last spring, namely that of exploring and understanding our student’s intellectual development with the aim of helping them attain higher order thinking skills. We discussed studies (Perry, 1970; King and Fischer, 1994; Baxter Magolda, 1992) that showed that most students entering college are not ready for higher order thinking. This is particularly true of our students who, for the most part, are the product of an educational system where memorizing information is rewarded with success.

In the past two issues of New Chalk Talk, we specifically referred to W. Perry’s seminal work to guide us in understanding our students. In his work, Perry recognizes different “stages” of intellectual growth for students. He divided these stages into four broad categories – dualism, multiplicity, relativism and commitment – and we discussed the dualistic stage where students perceive knowledge as “received truth” and believe that all problems have uniquely “right” answers/solutions which “authorities” know. Finally, we suggested strategies to help students move on to the multiplicity stage.

In this issue we will address the characteristics of the next three stages: multiplicity, relativism and commitment. Students transit into the multiplicity stage when they are forced sooner or later to recognize that experts and authorities sometimes disagree. They come to realize that uncertainty is legitimate, and that, at least in some areas, no one knows the answer. The transition is difficult and students are often frustrated. Some students may even resist their teacher and oppose anything he/she advocates demanding justification and evidence (Egyptian students are typically shyer than their American counterparts and may not express their resistance overtly).

Slowly, they learn to reach their own conclusions without relying exclusively on experts and learn to understand other points of view. While this development is an advance over dualism, multiplists typically see all opinions as equally valid. They do not attempt (or do not know how) to evaluate evidence which they may confuse with unsupported personal opinion.

Because "everyone is entitled to his or her own opinion," they may be surprised when their work is criticized and may view the criticism as arbitrary. Our role as teachers is to provide

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* I am indebted to all LLT colleagues, and especially Casey Grimmer, who are working collaboratively to meet this exciting new challenge.
them with a framework to develop skills needed to help them interpret and evaluate information from multiple viewpoints.

For this, I would recommend the Wolcott-Lynch “Steps for Better Thinking” framework which is shown on the following page. This framework can provide students at different stages of intellectual growth with the necessary support that they need to progress from the less complex to more complex cognitive skills.

Typically, freshmen and sophomores need to develop Step 1 skills while upperclassmen should focus on their Step 2 skills. Once they learn how to distinguish between weak and strong arguments and how to prioritize alternatives or solutions (Step 3) they have entered Perry’s relativistic stage. At this stage students typically have a hard time making decisions on complex social, political or personal issues because of the diversity of choices.

The majority of college students never get past relativism and the highest stage, “commitment”, happens later on in life after they have genuinely reflected and integrated knowledge with personal experience. This is when they commit to a position (choice of career or a decision regarding their personal lives etc) with the realization that intellectual growth is an ongoing process.

Sources:


### Task Prompts for Different Levels in “Steps for Better Thinking” (3)

<table>
<thead>
<tr>
<th>Steps for Better Thinking</th>
<th>Task Prompts That Address These Skills</th>
</tr>
</thead>
</table>
| **Step 1: Identify the problem, relevant Information, and Uncertainties (low cognitive complexity tasks)** | ▪ Explain why people disagree about______.  
▪ Explain why __ can’t be known with certainty  
▪ Identify aspects of ______ in which uncertainty is a major factor.  
▪ Explain why even an expert about ________ can’t predict with certainty  
▪ Create a list of information that might be useful in thinking about ___________.  
▪ Consult experts and explore literature or other resources to:  
  ○ Create a list of issues related to ___________.  
  ○ Create a list of different points of view related to ___________.  
▪ Identify a range of possible solutions to ___.  
▪ Sort pieces of information to identify reasons and evidence that support a given solution to ___. |
| ▪ Identify problem and acknowledge reasons for enduring uncertainty and absence of single “correct” solution  
▪ Identify relevant information and uncertainties embedded in the information (may including “stacking up” relevant reasons and evidence to support some solution or conclusion) | |
| **Step 2: Explore Interpretations and Connections (moderate cognitive complexity tasks)** | ▪ Discuss the strengths and weaknesses of a particular piece of evidence related to _______.  
▪ Interpret and discuss the quality of evidence related to ___________.  
▪ Interpret and evaluate the quality of the same body of evidence related to ___________ from different points of view.  
▪ Compare and contrast the arguments related to two or more solutions to ___________.  
▪ Identify and discuss the implications of assumptions and preferences related to one or more points of view about ___________.  
▪ Identify and discuss the implications of your own experiences and preferences for how you think about _____________. |
| ▪ Interpret information  
▪ Recognize and control for own biases  
  ○ articulate assumptions and reasoning associated with alternative points of view  
  ○ qualitatively interpret evidence from a variety of points of view  
▪ Organize information in meaningful ways to encompass problem complexities | |
Step 3: Prioritize alternatives and Communicate Conclusions
(high cognitive complexity tasks)

- After thorough analysis, develop and use reasonable guidelines for prioritizing factors to consider and choosing among solution options
- Communicate appropriately for a given audience and setting

Step 4: Integrate, Monitor and Refine Strategies for Readdressing the Problem
(highest cognitive complexity tasks)

- Acknowledge and explain limitations of endorsed solution
- Integrate skills in on-going process for generating and using information to monitor strategies and make reasonable modifications

Develop one or more ways to organize information and analyses to help you think more thoroughly about ____________.

- Prepare and defend a solution to ________.
- Identify which issues you weighed more heavily than other issues in arriving at your conclusion about ____________.
- Explain how you prioritized issues in reaching a solution to ____________.
- Describe how the solution to ________ might change, given different priorities on important issues.
- Explain how you would respond to arguments that support other reasonable solutions to ____________.
- Identify the most important information needs of the audience for communicating your recommendation about ____________.
- Explain how you designed your memo/presentation/_______ to effectively communicate to your audience.
- Describe how you would communicate differently about _______ in different settings.

- Describe the limitations of your proposed solution to ____________.
- Explain the implications of limitations to your proposed solution to ____________.
- Describe conditions under which you would reconsider your solution to ____________.
- Explain how conditions might change in the future, resulting in a possible change in the most reasonable solution to ____________.
- Develop strategies for generating new information about ____________.
- Establish a plan for monitoring the performance of your recommended solution to __.
- Establish a plan for addressing the problem strategically over time
Learning Commons: Enhancing Student Learning and Scholarship*

Dr. Pandeli Glavanis, Associate Director, Center for Learning and Teaching

Let me take the opportunity to join Dr Aziza Ellozy in welcoming back all colleagues and concur with her that this is an exceptionally exciting academic year as it involves much more than our move to the new campus. This is particularly so in the general area of student learning and scholarship as the Library and Learning Technologies (LLT) School has taken on the challenge of introducing a Learning Commons service area in our new Library building at the new campus. What is that, you might ask, and how can a space in a building relate to enhancing student learning and scholarship? Well as you did ask, let me elaborate.

Let me first make it absolutely clear as to what it is not. It is not a new name for the conventional library reference area that is invariably found in all main libraries and usually occupies the main service area of the library. Neither is it a conventional reference area with some additional new furniture and possibly some workstation clusters for student use. What is it then?

As Joan Lippincott (Lippincott, 2006), explains this a dedicated and carefully designed space within a University library whose primary objective is to support and enhance the mission of the institution and in particular with regard to student learning and scholarship. Thus, we can confirm immediately that the AUC Learning Commons will be a unique space, as is the case in most other institutions, which specifically addresses and supports the AUC mission of a liberal arts college intending to become a world class university. In other words, and although we will learn from other institutions that have developed effective spaces such as this, the bottom line is that we have to design our own in order to address our own unique mission statement. This is a new and very exciting challenge that needs to be designed and implemented as a collaborative effort between LLT staff, faculty, students and University administrators in order for it to both exemplify and support the evolving AUC mission itself.

Having noted what it is not and the fact that there is no blueprint of a successful example for us to use, let us consider what is involved and what will be required for us to meet this new challenge. Dan Gjelten, librarian at St Thomas University, presents a very succinct account which deserves to be noted:

I see that one rationale for the Commons is to ‘get students to the library’. In our case, it has been very effective in attracting students…But that begs the question…once they are in the building, what do we do with them? How do we engage them? The rationale for the learning commons…[is how] it will enhance student learning and scholarship. That is the real challenge, and the real goal of the learning commons. (quoted in Lippincott, 2006: 7.1-7.2)

Thus, it is clear from the start that the Learning Commons we envisage is a significant departure from a conventional reference service area as it has as a primary goal “the active engagement of students” for the purpose of enhancing their capacity to learn and improve
their respective scholarship. This requires specific and targeted design and activities that will enable it to happen. Let us consider briefly a couple of key areas highlighted by Joan Lippincott in her seminal account on the nature of a Learning Commons:

**Technology & relevant user services:** conventionally when libraries provide computer facilities they see them as providing the opportunity for students to retrieve electronic information which they will then use to produce assignments. In a Learning Commons we need to be able to provide both the hardware and the software that “provide users with a seamless work environment so that they may access, manage and produce information all at the same workstation.” (Lippincott, 2006: 7.2) This, of course, implies that the both the hardware and software provided is much more extensive than what is available in conventional libraries, but so is the support for students to use it. Thus, we depart from the conventional library where learned reference librarians epitomize the highest and only level of skill available to users. Instead we need alongside them, staff that can also provide support in such areas as IT, multimedia production, statistical packages, editing capabilities, geographical information systems, presentation skills, etc. In other words, all the skills available within LLT working in close collaboration to support the students. Thus, the reference desk, which will continue to play a vital role, has to be matched as well by a services and information desk in an active Learning Commons. In fact, it could be argued that the skills available at such a desk or space go even beyond what LLT can offer. For example, students may also need help from the Writing Program, as they work on assignments, and other skills such as presentation skills, as they prepare to make a multimedia presentation in class and need somewhere to practice. If possible such services should also be provided within the Learning Commons.

**Group Working Spaces:** traditionally libraries focus on “quiet spaces” with a few rooms dedicated to group work. Learning Commons have the opposite objective and should provide a “variety” of spaces where students can work collaboratively and also combine social interaction, relaxation, reading media and academic work. Thus, furnishings MUST take into account all these dimensions and provide everything from dedicated rooms for collaborative work to soft furnishings and refreshments for social interaction. This will enable students to work collaboratively on projects and consider spending “time” in the Learning Commons. These are also areas where professors can arrange to meet groups of students in order to explore certain issues which may also require the use of sophisticated electronic resources, information and/or hardware.

**Combining academic work with social activities:** conventional libraries see themselves primarily as the key source of academic resources for the university community which they serve. Social activities and/or interaction is seen as taking place in other spaces and provided by others within the university community. Learning Commons aim to combine the two, as much as they can, and thus provide our modern day students with a seamless environment where they can move from social to work and back again with great ease. Our students are of a generation which “multitasks” and drifts between social, leisure and work with great ease. To attract them, keep them and engage them the Learning Commons also needs to provide a similar environment to the extent that it is possible. Thus, spaces within the Learning Commons where students can listen to music, watch a DVD, see a short live performance or
listen to an invited speaker, in between working on assignments, recreates the seamless social-work environment they seek.

To achieve the above will require considerable planning and involvement from all sectors of the University. LLT may well lead on this, but will require the active support of all other sectors in order to be able to address what is both needed and appropriate for AUC as such. The challenge is most exciting and is in fact a major new departure and innovation not just for LLT, but for the University as a whole. If we manage to do so then we can see ourselves

Walking into a busy commons on a weekday evening, [and] see groups of students clustered around computers, some chatting, others talking on cell phones, some with headphones listening to audio while they work on computers, and some working on their own, perhaps on a laptop, with coffee and snacks, books and notebooks spread out on a table. It would be difficult to tell, without peering over their shoulders, exactly what types of activities the students were engaged in, particularly whether they're recreational or academic. Are they playing computer games? Buying things on the Internet? Sending and receiving instant messages? Or are they involved in more scholarly pursuits, such as accessing journals licensed by the library, using art image collections, writing papers, editing videos for course projects, or accessing assignments through a course management system? The students probably are doing some of each. (Lippincott, 2006: 7.5)

Sources:
Learning Commons: Where learning can be SEEN and the sounds of learning can be HEARD

Dr. Pandeli Glavanis, Associate Director, Center for Learning and Teaching

Conventional Academic Libraries have invariably acted as gatekeepers and their interior design has reflected their role as the guardians of printed materials and their function as processing and preserving such collections. Instead the Academic Library of tomorrow should become a space where specialized public services support and enhance the entire spectrum of learning; i.e. from idea formation to knowledge production. Similarly, librarians need “to acknowledge that students and faculty have gravitated toward interactive learning and collaboration in the analysis, presentation, and publication of knowledge because of their increasing reliance on electronic databases, digitized formats, and interactive media. While many areas for quiet study [will] remain throughout the library, the sounds of learning are encouraged” (Lombardi & Wall, 2006, p 17.3) As such the library of tomorrow resembles more a modern commercial bookstore or cybercafé where skilled staff work in close proximity to the users in an environment that reflects flexibility, and at one and the same time opportunity for academic scholarship and relaxation. The Learning Commons in the new AUC library is, of course, the ideal space where this can happen.

Nevertheless, the achievement of such an objective also requires a re-envisioning of Library and Learning Technologies (LLT) in such a way so as to be able to provide users a seamless, easy and convenient access to the full range of services and support required by modern scholarly activity and in the appropriate medium and format. Thus, instructional technologists, IT specialists and technicians work alongside reference librarians to form a team that provides targeted support to users as and when required. For example, e-printing and multimedia production of assignments should be available within the same space as access to electronic resources and information and writing skills guidance. For students the separation of such services into distinct and autonomous units does not make sense. They expect and require a multiplicity of services to be available within a transparent and easily accessible single entity: the Learning Commons.

Such a re-envisioning, of course, also generates additional benefits for the entire university community. Close collaboration between the various specialized units of LLT will also enhance a new culture of collaborative work, cooperation in providing services and foremost the provision of resources and support that exemplify a “central LLT image” to users. Thus, students will find compatibility between software deployed in classrooms and other campus machines with those provided within the Learning Commons. Faculty and students will receive similar induction and training in the use of learning management systems and other specialize software (e.g. SPSS or GIS) and thus eliminate incompatible learning curves. Furthermore, the provision of a single and coherent “central LLT image”, to be seen by all users, will also enhance efficient management solutions to issues raised by users. This visibility and coherence of LLT seamless services can only contribute to enhancing learning across the University.
In this respect it is possible to suggest that learning can come to life and can be both seen and heard within a Learning Commons environment. An environment which if designed well can ensure that users gain maximum value from their respective forms of social interaction with each other and staff. In fact, the Learning Commons should approximate as much as possible.

A space not unlike the ancient marketplace or agora, serving students and faculty as an inviting “third place.” Neither a formal workplace (scheduled classroom) nor a private realm (office, dormitory or apartment), the library becomes a center for student life as well as intellectual hub and laboratory for learning. (Lombardi & Wall, 2006, p 17.1)

How do we achieve such an objective, however, and also ensure that our future Learning Commons in the new campus library fulfils the expectations of its users? Diana Oblinger suggests that this has to do primarily with our professional culture and experiences and what expectations we have. In other words, how we see things? Oblinger goes on to ask When thinking about colleges and universities, what do you see? First and foremost, you see learners—students, faculty, and staff. You see learning—active, experiential, reflective, and collaborative. You see places—classrooms, laboratories, libraries, cafés, and virtual spaces. And, you see technology—computers, wireless networks, digital learning resources, search engines, and analytical tools. [Thus], if we are committed to transforming learning, perhaps we should practice Da Vinci’s saper vedere—knowing how to see. (Oblinger, 2006, p 14.1)

Yet, when asked to describe a library many of us revert to conventional accounts that resemble a warehouse for storing books rather than active spaces where learning comes to life. What should we see? Again Oblinger suggests What if you “saw” something different? What if you saw learners rather than lecturers? What if you saw chatter rather than silence and action rather than stillness? What if you saw learning as something social rather than something cerebral? What would be different? Expectations? Learning spaces? Learning? (Oblinger, 2006, p 14.2)

What Oblinger is suggesting is that we have to learn how to see in a different way and thus allow words such as learning, engagement, interaction, and excitement become pervasive in our vocabulary and cognitive structures. Furthermore, we have to learn to see space shaped by learning, a service philosophy prevailing, technology integration in all aspects of or service delivery, experimentation and innovation and especially user involvement. For example, we need to ask what learning activities and forms of social interaction will enhance certain learning outcomes as compared to which projection system we should install. We may find that flexible and movable furniture that enables group work and peer-to-peer instruction adds greater value to learning than extensive reference shelves stacked with reference material. We may even find that designing “socially catalytic” spaces has a greater impact on student learning than ensuring “silence” prevails within the library. In fact, Oblinger notes that “learning commons provide spaces for interaction and exchange; silence is not required”. (Oblinger, 2006, p 14.4) Thus, Oblinger is suggesting that we have to learn to see differently if we are to achieve the objective of enhancing learning in our modern library. A point echoed by Les
Watson who notes that “We spend a lot of time trying to change people. The thing to do is to change the environment and people will change themselves.” (Watson, 2006, p 24)

What can we conclude from the above? The Learning Commons is a space which will have to accommodate different activities, each of which will be associated with different behavioral patterns. As such the Learning Commons is likely to be the **most multifunctional space within the University**. It should provide “social spaces, student services and study support, book and laptop loan, access to IT, and different kinds of working environments, from comfortable seating for collaborative group work, to 'board rooms' for practice presentations”. (Watson, 2006, p 22) To ensure that this will happen we need to start thinking and seeing learning in a different way. We must evolve collectively a new vision of the library, which abandons the conventional view of it as a warehouse for books.

**Sources:**


Getting Students Excited About Your Course:  
A Tip From The Best University Teachers 

Dr. Mark Werner, Assistant Professor, Department of Mathematics

What makes teachers “good”? Don’t we all dream to be the type of teacher for whom students continually pack their classes, so eager to learn from them that they can’t wait for the next class, and sometimes even bring their friends too… the type of teacher who would be considered “outstanding” by students and colleagues alike. Is this even realistic? I recently came across a great little book describing common characteristics of exactly such a group – all of them university-level teachers at well-known research-institutions. “What the best college teachers do”, by Ken Bain (2004), presents a fascinating snapshot of professors from a variety of fields who have inspired their students to truly master their respective subjects, according to whichever criteria you wish to employ. I was personally inspired by the book, and was asked by Dr. Aziza Ellozy to provide a brief summary to the AUC teaching community.

One of the main points emphasized by Bain is that the most successful teachers don’t concentrate so much on transferring facts or “isolated information” because this often leads to “strategic learners” – students who have mastered the skills of doing well on exams and getting high grades, but who have forgotten most of the content by the next semester. Rather, the best teachers figure out ways to motivate students to study and work hard almost without their realizing it. Accordingly, they often remember the subject matter years after taking the course. Many teachers encounter this with perhaps a handful of students, but the truly great teachers are able to achieve this for just about the entire class.

This process can be started by providing a sufficiently deep challenge to students that would show that their previous knowledge is inadequate. The next step is to stimulate them to view that the problems in your course are so incredibly important, intriguing or beautiful, that they can hardly wait to solve the new problems you have presented. For instance, a group of Physics professors at Arizona State University devised an experiment for the first week of class that required students to predict the motion of an object. Nearly all of them (including the A students from previous courses) got it wrong, clearly demonstrating that their existing knowledge was totally inadequate to explain the world around them, and that there are tangible consequences to making the wrong predictions.

Many professors think that their fields have unique challenges in that they have to get through a packed syllabus. These feelings are probably more prevalent among many more disciplines than commonly thought. For instance, medical students who take the dreaded “anatomy” course don’t normally have high expectations of the course because of the perceived heavy emphasis on rote memorization. However students at Northwestern University who take the course with a particular professor always score in the top percentiles at the external medical board exams because of the way this professor tackles the material: her approach is to devote a lot of class time to case studies and actual
applications such as medical (mis)diagnoses. This engages the students and indirectly motivates them to master the intricacies of the human body. Additionally, she deliberately tries to invoke in her students the same sense of awe she recalled having when, for example, she first encountered the human brain.

Great teachers know how to grab the attention of the entire class, and maintain it. As a matter of fact, students frequently learn more when not in a formal “classroom mode”. Bain talks of a medical professor from Stanford who would sometimes start his class with something along the lines of, “Before we get started, I was having some trouble with my back this morning…”, and before long, the students are offering all sorts of advice, insights and hypotheses making it easy to transition into the topic of the day, which “just happens” to be the human back.

The best teachers lead their students on a journey of discovery – regardless of what the “facts” might be, there are almost always ways to get students interested and involved in how these facts came about – what factors led to their discovery, what controversies did their announcement provoke, what sort of impact did they have on the development of our understanding of this field or the world at large? One of the teachers cited by Bain is a calculus professor from Stanford who often garnered 90% of all the department's A's on the common departmental final exam. His most fundamental idea consists of getting the students to “re-invent” calculus, leading them step by step to rediscover each topic, so that they think it’s only a matter of being born in the wrong century that prevented them from taking Newton’s place as the originator of the important theorems of calculus.

This process of discovery is a critical one, and requires teachers to be active researchers in their field; at a minimum, this entails keeping up to date with current developments in it. Bain also states that the best teachers have an “unusually keen” knowledge of the historical development of their subject, so that they are able to convey scientific theories as controversies, refutations, vindications, etc. – a genuine struggle in search of truth.

Sometimes innovative teaching methods are criticized as relaxing the standards, and that students like them because they can get higher grades with less effort. That certainly need not be the case. Not one of the best teachers examined in this study was, in fact, known as a “lenient grader”. To the contrary, they typically had higher expectations of the students than their colleagues, but they gave plentiful help to enable the students to reach their objectives. They conveyed an implicit trust in the students’ ability to do so, an aspect that was clearly noticed and acted upon by the students.

Of course, outstanding teaching is more than a collection of strategies, but rather a process and a journey, that begins with deep reflection about what is required to get students to “care deeply” about your course. Time spent getting their attention with various experiments, discussions, and multimedia shows, even if at the expense of covering “all” the material you thought you just “had” to teach usually pays for itself several times over in the form of increased student motivation to work hard outside of class. And naturally, every teacher has his/her “bad days”. The examples studied by Bain were no exception. But as we say in statistics, a few odd data points are not what describe the situation; what counts is the trend…

Sources
Concept/Mind Mapping (Part 1):
Initial Experience and Lessons Learned

Dr Aziza Ellozy, Director, CLT, Associate Dean for Learning Technologies
Dr Hoda Mostafa MD, Cairo University, Adjunct AUC Faculty

Last month, CLT hosted 2 consecutive workshops on concept mapping and mind mapping. With an encouraging faculty turnout we introduced concept mapping as a teaching tool for educators and a learning tool for students.

Having used concept mapping/mind mapping considerably during her years as a medical student, Dr Mostafa found it to be an invaluable tool that provided a global picture relating to any given topic. It also helped her identify connections that were not readily apparent in texts and outlines.

With her encouragement, we decided to take concept mapping on a “dry run” by incorporating it into the syllabus of two “Scientific Thinking” sections this semester. Our main motivation stemmed from the simple goal of wanting our students to read the assigned articles in-depth before coming to class, and to read them “critically”. We had previously tried other strategies like giving them bonus “reading quizzes” during the first five minutes of class. The results were mixed: the students loved the idea of a “bonus” and would technically read the assignment, but they quickly learned to “read for the quiz”. This resulted in a superficial understanding of the text which they tended to forget within a short period of time.

We decided to try something new by assigning a concept map for each reading. With the help of a free online software we thought we had something promising. At the very least, the students were going to learn a new skill, and hopefully come to class prepared for an interesting in-class discussion. It turned out to be much more rewarding. But before sharing our experience, a few words about concept mapping and mindmapping are in order.

FAQs about Concept Mapping and Mind Mapping

Concept maps were first used by J.D. Novak and his colleagues at Cornell (1960s) as a means of representing relationships between concepts. They are grounded in the learning theory known as “constructivism” which views the importance of prior knowledge as a framework to learn new knowledge. Based on this model, concept maps should help us identify how our students think. So…

What is Concept Mapping? Concept mapping is a way of graphically representing knowledge. Knowledge is dissected into clusters (concepts) or nodes of information which are embedded in boxes. A central concept is linked through a network of “nodes” to related concepts. Links can be made between the nodes with arrows and/or connecting phrases.

What is Mind Mapping? Introduced by Tony Buzan in the 1960’s, it is a graphical technique of taking notes or visualizing thoughts or ideas. Mind maps are highly visual with icons and colors as well as inserts in the form of images or other visual prompts. They are structured around one central concept, word or idea, with branches and sub-branches of related ideas.
**What's the difference?** Basically a mind map has one central concept while a concept map may have many. While they can both highlight links between concepts, mindmaps are **highly visual**.

**How can I incorporate mapping into my classes?** Once you try it out for yourself, the sky is the limit. You will be able to select what works best for you in your classroom environment. We have used a hybrid technique that integrates the visual effects of mindmaps into concept mapping. So far our students have had to prepare:

- Concept maps/mind maps for assigned readings
- Concept maps/mind maps on broad topics such as “Evolution”
- Concept maps/mind maps for lectures.

**How do I prepare students for concept mapping?** It’s always a good idea to start out slow. Introduce the idea first. Assigning a short in-class activity where students practice using a hand-drawn map seems to work well. Another option would be to brainstorm as a class and work out a map together on the board where students can see it all fall into place “real-time”. Students should be advised to use a pencil and paper to plan out their maps regardless of whether or not they plan to use a mind mapping software. Most students, with time, will come to find this highly visual form of learning useful.

**What about computer generated maps?** Multiple software systems for mind mapping and concept mapping are available. This semester we used a free online mapping software; “mindomo.com”. Computer generated maps offer many advantages over paper and pencil including the option of altering maps easily, inserting images and hyperlinks, saving it as an image or PDF file in addition to a wide variety of other options.

*(To be continued)*

**Sources:**
For information about concept mapping and JD Novak’s work see:

For information about Mind Mapping and Tony Buzan’s work see:
http://dmc.umn.edu/objects/mindmap/

Visit this site for free online mapping software: http://www.mindomo.com
Concept/Mind Mapping (Part 2):
Initial Experience and Lessons Learned

Dr. Aziza Ellozy, Director, Center for Learning and Teaching
Associate Dean for Learning Technologies

and

Dr. Hoda Mostafa MD, Cairo University,
Adjunct AUC Faculty

In our last issue we introduced concept mapping and mindmapping as learning and assessment tools. We discussed the context in which we decided to use these devices in “Scientific Thinking”, a course designed for freshmen. We highlighted the difference between the two mapping methods, described how they are created, and made suggestions as to how they can be incorporated in your courses. We emphasized that our approach to mapping was a hybrid approach that integrated the powerful visual cues of mindmapping into concept maps.

In this issue we will concentrate on what we have learned as educators when we used this tool for different types of assignments and assessment exercises.

- Given that our main objective was to have students read the assigned texts before coming to class, we can safely say that this was achieved with the possible added bonus of deeper understanding. In an anonymous end of semester survey, 88% of the students in one of the sections (N= 26), agreed or strongly agreed that doing concept maps “required me to look at the assigned reading in more depth”.

- After an initial pen and pencil introduction, most of our students learned how to use the free online “Mindomo” software quite easily. Although not all students immediately took to concept mapping most of them ultimately learned to create them proficiently.

The example below is that of the second Cmap that students had to draw for an assigned reading.

The basic mapping strategy was to have students convert linear text into a non-linear graphic representation. This exercise is especially useful for our freshmen and our entering students who are used to thinking and studying in a linear manner. The method requires them to represent the article as a whole and to visually show relationships between concepts or ideas.
In this example, it is evident that the student was able to highlight the four main ideas of the article, to demonstrate the relative importance of the major concepts and to use the visual cues of thumbs up or down to interpret meaning. Simple relationships were also effectively mapped through connecting arrows. This alone was much more than we could have ever hoped for from an assigned reading that was to be discussed later in class.

- The following are two examples of Cmaps for a lecture presentation by Dr. J. Swanson “Who are the great scientists of all time?” The students were given a rubric which spelled out for them how the quality of analysis and interpretation was to be translated quantitatively to a grade. It is helpful to compare the two.

A. The relative importance of ideas is indicated but is not very distinctive; relationships are not mapped
Although both are well organized, the difference in details, in organization and in structure is very apparent. In (B) the non-linear structure provides a complete picture of the lecture while in (A) the structure lacks details. In addition, in (B) the student makes very effective use of the visual elements of the mindmapping software (different ideas are grouped according to different colors and shape). Visual symbols add interpretive meaning with economy of space. And this is where the strength of these maps lies: while no two maps can ever be alike, they provide immediate visual data on a student's understanding or misunderstanding.

- The next example shows two Cmaps of Karl Popper's article “Heroic Science” (1974). Most of the students complained that the article was difficult and yet, for most of them, their Cmaps revealed otherwise and the in-class discussion was productive. Had they simply been assigned to read it, they would have abandoned it and come unprepared to class to find out the “professor’s” explanation. The following two Cmaps are examples of how easy it is to assess the different analytical skills of students and how one can “read” their interpretation (or misinterpretation) of the article.
C. This is an example of a student with poor analytical skills who uses the non-linear structure of the map to weave in a narrative. Linear thinking is forced in the non-linear packaging of the Cmap. The ability to distinguish the relative importance of ideas/concepts is lacking and so is the ability to find correct relationships between the various ideas in the text. Note that there are 32 primary branches and very few secondary branches.

D. Same article. Student distinguishes significant and relevant ideas very clearly. Visual cues are used effectively and reinforce a correct interpretation of the article.
The next two Cmaps illustrate a different type of assignment and/or exam question. (On an exam they would use pencil and paper). In this approach, students did not have the “scaffolding” afforded by a specific article or lecture. They are asked to draw a Cmap on a **broad open ended topic** which they had discussed in class. Their sources are lectures, articles and websites. This approach calls upon their **synthesis skills** and challenged them to give a coherent overall picture of the topic at hand.

**E. Topic: Biological**

**F.** A computerized rendition of a student’s pencil and paper Cmap in an in-class exam question. They were asked what he/she knew about the DNA molecule and its connection to broader topics. This type of Cmap is the more traditional way of using them to assess knowledge.
• It should be noted that, for this tool to be used effectively, it is very important to provide students with a rubric that reflects your expectations and the way in which the Cmap will be graded.

• Finally this type of mapping is fairly time consuming: in an end of the semester survey, in one of the sections, 48% of the students (N=26) said that they took more than an hour to produce the map and 44% said it took them between ½-1 hr.

**Summarizing:** Concept maps are a window into your student’s minds. They reflect how they dissect information, cluster knowledge under common branches and recognize links. No two concept maps will be alike. When a student creates a “poor map” with disorganized or multiple irrelevant nodes, instructors can sense areas of weakness or misunderstanding. Basically it gives instructors insight on how their individual students think. *They are by no means a unique way of testing or evaluating content or critical thinking but, coupled with written assignments and other active learning approaches and assessment techniques, they can prove to be very effective while addressing students’ different learning styles.*

**NOTE:** If you are interested, be on the lookout for our workshops on C-mapping. This semester’s list of workshops will be sent to you very soon.
Reflective Practices in Mathematics Courses (Part 1)
Ryan Derby-Talbot, Assistant Professor of Mathematics

Conversations with Amir
Several weeks ago I ran into Amir while walking around on campus. Amir is a junior engineering major at AUC, and was a student in my Calculus III class in the fall of 2006. I remember him particularly well because of the insightful questions he asked in class and the consistently high quality of his homework assignments. As we chatted, Amir said to me, “Doctor, I really like math. I would be a math major if I weren’t in Egypt where an engineering major carries so much more credibility.” (This is a common statement from students, which is an unfortunate byproduct of the cultural reverence for only a few select majors.) Amir continued, “But Doctor, I have a problem. When I go to the next math class, I forget everything. I know how to do it when I’m in class, and I do well on the exams, but in the next semester I don’t remember any of it. I mean, none of it.”

As I parted with Amir, this statement weighed heavily on my mind. Amir was by all means a good student; he earned a solid B in my class, and, as I mentioned above, demonstrated the ability to be insightful with his observations in class. Yet he had candidly revealed to me a common situation with AUC students. If Amir, who is both perceptive and enthusiastic about math, recalled very little from his math classes, what would the average student be taking with them from their courses? While it is common for faculty to blame students for their lack of retention and abilities, the (often unexamined) attitudes and habits of teachers (myself included) contribute just as much if not more to this problem. In the following paragraphs I wish to explore ways of dealing with this situation, but not by presenting a set of didactic points about “How to teach”. Instead, my aim is to provide several talking points that we as teachers can use to reflect upon and engage in dialogue about the assumptions that we use in creating our lessons and courses.

Education as Information Transfer
A common assumption that I have found that pervades the pedagogy of many professors is that teaching is fundamentally about information transfer. The teacher is presumed to be a keeper of a vast storehouse of information that is to be distributed to the students in pieces that they can digest. To demonstrate that the student has done their duty of “absorbing” the material, they transfer the information back to the professor via paper or exam and are evaluated on this process. As a discipline, mathematics is set up especially well for this procedure. Students do well in math courses if they answer problems in standard templates that have been handed down from teacher to student throughout the ages. The problem with this methodology is that while students may become competent at reproducing standard answers, they do not necessarily develop the ability to create answers to problems. Moreover, without having grappled with the material and “making it their own”, students do not develop the capacity to evaluate, modify or articulate their own thinking about the subject.
In Egypt, the mindset of information transfer seems to have taken a particularly strong hold in mathematics. In Egyptian secondary education, students are by and large taught mathematics via rote memorization. For example, in preparation for the university entrance exams, Thanawiya `Amma students will sometimes complete the exams of several previous years as their sole method of study. Understanding when, how or where such information came to be becomes irrelevant; the goal is simply to advance through the next hoop of educational advancement via passing the test. The result is that students enter mathematics classes at AUC terribly under-prepared, and even worse, they do not realize their situation.

What I have found myself doing in response to this situation is to try to supplement my classes with the content of Calculus that the students may have missed in high school. Time and time again I have derived the formulas, stated the key ideas, and reiterated the basic techniques. My hope is that in learning the derivations behind and connections within the material, the students will not only have a more complete understanding of Calculus but also will be able to perform well in future math classes or in problem-solving activities in general. Yet despite this effort, there still are cases like Amir’s, where students demonstrate proficient knowledge (even of the derivations) while taking a course but are unable to retain benefits of that knowledge once the course is finished. What is going wrong? It seems that as teachers we deal with this situation by doing the same thing over and over: we grumble about the lack of student abilities and continue to try to fill in the gaps by repeating the fundamental concepts of the course enough times so that they stick with the students. We have, however, arrived back at square one – trying to teach the students by transferring more information to them. This only leads to more of the same problems for students. Is there an alternative to just focusing on information transfer?

As I have reflected on this question, I have noticed that much of the problem lies in the fact that effective teaching requires the development of two very different skill sets in students. On the one hand, we must teach the students the mechanics and technical processes required to engage in the discipline, such as the requisite formulas or templates. On the other hand, we must teach students how to be creative in the discipline, so that they can produce their own work and generate their own ideas. The latter process is made difficult by the fact that no template seems to work here. Due to this difficulty, often we default to teaching only the templates and formulas, resulting in our classes becoming primarily about information transfer and leading to the aforementioned problems.

We will continue this discussion in the next New Chalk Talk issue, where we will consider how we can teach both skill sets – technical procedure and creative process – and examine assumptions that can hinder such development.

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68 Thanawiya `Amma is one of the secondary education systems in Egypt. It concludes in examinations, the results of which many universities (including AUC) use for admission standards.
Reflective Practices in Mathematics Courses (Part 2)
Ryan Derby-Talbot, Assistant Professor of Mathematics

In Part 1 of this discussion, we began examining some basic assumptions in pedagogy that seem to inhibit the learning and retention of even bright, eager students. We provided an example of a student, Amir, who demonstrated proficient knowledge while taking a Calculus III course, but later revealed that he had not retained the benefits of that knowledge once the course ended. We noted that the pedagogical assumption that teaching is primarily about information transfer affects both the problem and our attempted solutions of it. Here, we begin to explore more deeply the assumptions we often hold about teaching, and how we might overcome the problems stated above by developing creative ability alongside technical competency in our students.

Two Assumptions in Pedagogy that Shape Our Courses

In our discussion last time, we noted that teaching is often regarded as a process of information transfer. This is the result of the common pedagogical assumption that the most important component of a course is content. While I do not deny that the specific content of a course is fundamental to it, the (largely unquestioned) assumption that it is the most important part of the course seems to result in the course becoming primarily about information transfer. This can lead to a superficial and incomplete understanding of course material on the part of the students due to the attitude it fosters in them: memorize, regurgitate, and move on. Yet this assumption is so ingrained in the way that we teach that we tend to yield to it readily. I admit that there have been many times that I have been lecturing, and after having noted only five minutes left of class time, I hurriedly wrote down (without much explanation) the remaining content that I needed to get through that day to fit everything in. The pressure to cover everything on the syllabus is so great that I feel I must get everything written on the board, lest I fail in my duty as the professor of the course. Yet this strict mindset of covering the content in entirety seems to benefit students only minimally, if at all.

A second observation I have made is that there seems to be a discrepancy between the processes of research and teaching in the viewpoints of many members of academia. All of us as professors have achieved our status by engaging in some sort of research, and all of us can attest to the fact that such a process is at times vague, confusing, frustrating, compelling, and ultimately rewarding. Doing research involves a creative process of trial-and-error, whereby we test different ideas through a variety of techniques, slowly and carefully refining and redefining our processes to ultimately arrive at a conclusion. Interestingly, however, once the research is completed and the results become knowledge (however many years later), they are delivered to the students as facts to be learned, removed from the processes of inquiry with which they were once indistinguishable. As researchers, we learn our results through experimentation and discovery, creating motivation and insight for us, yet we often expect students to develop this motivation and insight without the requisite experimentation and discovery.
Reflective Practice

What we seem to miss when we regard our classes as forums for information transfer is that education is more fundamentally about developing an attitude of questioning and learning, not so much about storing facts. In the book *The Reflective Practitioner* by Daniel Schön, the author attempts to articulate and measure what he calls the process of being a “reflective practitioner,” an individual capable of successfully solving problems in their professional field by the use of observation and insight. Schön noticed that what distinguishes successful individuals is not the amount of information that they can recite, but rather the ability to effectively question and engage with a given situation that they are facing – essentially their ability to employ creative processes. Of course reflective practitioners do not shy away from information, but rather use it as part of a process to understand new situations that they have encountered, very much akin to academic research.

In line with this idea of education, then, it seems that our classes should teach skills of reflective practice alongside the teaching of course content. In other words, in addition to learning the specific material of a course, students should also be required to use such information to experiment effectively and to problem-solve situations on their own. The key is to ask the appropriate question while designing the lesson: rather than “Am I forming a complete list of all the content in my lecture?” one could ask “In what way will the students be more effective in their articulations of and actions in the world?” Once the question is set, the actual classroom practices can take a variety of forms, from interactive discussions to journal-writing practices. In my Calculus I courses I am currently formulating a way to have intricate, week-long homework problems be part of the course, taking the place of some of the emphasis on timed, in-class exams. My intention here is that the students develop their creative capabilities by wrestling with more of the fundamental issues of problem-solving, beyond just applying formulas given in class to some template-based problem.

Let me emphasize that pursuing this question itself is an opportunity to engage in reflective practices for ourselves. The ideas presented here are not meant to be didactic points but instead directions for dialogue. There is no one way to teach, nor can one be outlined in a simple essay. Nonetheless, engaging in the questioning of our attitudes can be beneficial for the students as well as ourselves. This semester, my teaching assistant and I are meeting weekly to design homework assignments for our Calculus I students that go beyond just drill problems to include “beautiful” or “elegant” problems, as well as broader problems outside of just the technique-of-the-week. These meetings with him make a difference for the students, and keep me engaged in the reflective process myself. The result is that teaching my classes has become more interesting, as it brings about opportunities to explore creative processes for both the students and myself. If nothing else, let us keep these questions as part of our conversations rather than letting them slip into unquestioned assumptions. Perhaps that will make a difference for students like Amir.

Multiple Intelligences Re-Visited

Emma Zevik, Performing and Visual Arts (PVA)

In “Multiple Intelligences: What It Is and Why It's Vital Today” (New Chalk Talk, Volume 5, Issue 10), we took an overview of the methodology and definitions of Howard Gardner’s groundbreaking work in education and adult learning development. In this issue, we explore ways to begin thinking about incorporating MI in the AUC classroom.

It is crucial to reflect on our normal roles in the classroom as “experts” with the power to make decisions over course content as well as delivery method (stand-up lecture) and assessment (traditional exams). As professors remain focused on the traditional role of lecturer in control on information and knowledge and thus also its transmission, there leaves little possibility and freedom for students to participate except as passive recipients with little or no power or control over their learning experiences – resulting most often in poor retention, poor performance, poor morale. Empowering students to take responsibility for their own learning requires professors who can comfortably encourage them to explore and experiment with their own strengths and preferences, allowing them to become the “expert.”

From a report of MI approach in classroom for adults in ESL courses:
"Rather than functioning as a prescribed teaching method, curriculum, or technique, MI theory provides a way of understanding intelligence, which teachers can use as a guide for developing classroom activities that address multiple ways of learning and knowing” (Christison & Kennedy).

How to Take the Leap
It's best to start small and explore a few ways to loosen control and let go of power in the classroom. As comfort level grows and the resulting effects with students are observed, most educators are enthused and encouraged to continue making more and more changes in their teaching pedagogy.

First, a self-assessment is useful and beneficial in order to understand our own MI strengths. Here is a link to an online self-assessment: <http://www.mitest.com/o7inte~1.htm>. It's best to remember that this self-assessment is only a guide to our preferences – not a concrete judgment on our abilities or skills or talent!! H. Gardner’s work clearly shows that all the MI areas are competencies that can be strengthened with practice - quite different from the traditional IQ test with concrete and judgmental scores leaving little possibility for growth and development!

Planning and Teaching Strategies

When Planning a Class Lecture, Ask the Right Questions!
Certain questions can help professors look at the possibilities for involving as many intelligences as possible. Here I include some examples of learning activities with possible assignments.

**Linguistic**: How can I use the spoken or written word? Use books, stories, poetry, speeches, author visits. Assigned activities: writing scripts, poems, storytelling.
**Logical-Mathematical:** How can I bring in numbers, calculations, logic, classifications, or critical thinking? Use exercises, drills, problem solving.

**Spatial:** How can I use visual aids, visualization, color, art, metaphor, or visual organizers? Use posters, art work, slides, charts, graphs, museum visits. Assigned activities: drawing, painting, collage, posters, photos, illustrations, graphic design.

**Musical:** How can I bring in music or environmental sounds, or set key points in a rhythm or melody? Use tapes, CDs, sounds. Assigned activities: performing, chanting, playing, composing.

**Bodily-Kinesthetic:** How can I involve the whole body, or hands-on experiences? Assigned activities: movement presentations, athletic events.

**Interpersonal:** How can I engage students in peer or cross-age sharing, cooperative learning or large-group simulation? Use teams, group work, specialist roles for plays, debates, panels.

**Intrapersonal:** How can I evoke personal feelings or memories, or give students choices? Give reflection time, meditation exercises. Assigned activities: journals, diaries, memoirs.

### Examples of Classroom Activities Utilizing MI Areas

**Group Discussion:** Linguistic; Interpersonal  
**Journal Writing:** Intrapersonal; Linguistic  
**Making a video:** Logical; Musical; Linguistic; Interpersonal; Spatial  
**Building a model or 3-D display:** Kinesthetic; Logical; Spatial

For a report on my own entrance to teaching through MI in 1994 please feel free to review the following article: ERIC #: ED394408 “Masks and Mask-Making//Reading and Writing: A Kinesthetic Approach” or email me at ezevik@aucegypt.edu and I can forward a PDF copy.

The benefits to students are simply too numerous and too effective to ignore or to delay further.

As Thomas Armstrong states, MI applications “can help us develop neglected intelligences, activate underdeveloped or paralyzed intelligences, and bring well-developed intelligences to even higher levels of proficiency.” (Armstrong)

### Sources:

Armstrong, Thomas. "Multiple Intelligences." April 2006  


Learning Relationships: From Theory to Designing Learning Objects
Dr. Pandeli Glavanis, Associate Director, Center for Learning and Teaching

In a recent issue of New Chalk Talk (Volume 5, No: 3) Dr Doris Jones contributed a most welcome comment on the significance of visual rhetoric and argued for the integration of visual literacy into text-based writing assignments. Coming as it did from a professional colleague in the Writing Program at AUC the message carried additional weight for many of us who continue to experiment with ways of motivating critical learning and self-learning in the classroom. The message conveyed by Dr Jones, of course, has also been a key and central issue of many studies and scholarship related to the centrality of visual images in our daily lives and even in our cognitive self. Dr Jones cites several such sources and I would like to contribute one which had a significant impact on my own approach to teaching many years ago. In 1972 the BBC produced an excellent documentary entitled Ways of Seeing, in which John Berger argued for the primacy of visual texts in a most forceful manner. (Berger, 1972)

In effect Berger’s message was quite basic as well as very complex and sophisticated. In the first place he argued that “Seeing comes before words. The child looks and recognizes before it can speak”. (Berger, 1972: 7) This basic point underscores the significance of visual text and especially in an independent relationship to cognizance. Berger, however, also went on to argue that there is another sense in which seeing comes before words. Berger noted that “It is seeing which establishes our place in the surrounding world; we explain that world with words, but words can never undo the fact that we are surrounded by it. The relation between what we see and what we know is never settled…The way we see things is affected by what we know or what we believe.” (Berger, 1972: 7-8)

It is particularly this second and more complex argument by Berger that inspired my own teaching methodology and thus I have made use for a considerable time of a variety of visuals texts from still pictures to videos in trying to enhance critical thinking and self-learning in my classes. Nevertheless, it was not until much later and with the development of research in the cognitive science related to the scholarship of learning that I was able to grasp both the centrality and the opportunity afforded by such visual rhetoric in the learning relationship. It was in fact the pioneering work of Wenger in the late 1980s on cognition and learning relationships and especially his seminal text entitled Communities of Practice: Learning, Meaning and Identity (1998) that provided me with the theory needed to explain and account for the use of visual rhetoric in the learning relationship. In particular, it was Wenger’s work which enabled me to select the appropriate visual rhetoric for particular learning situations and thus engage even then in the production of what is now commonly referred to in the literature as targeted “learning objects” intended to communicate a certain concept or issue as well as generate critical thinking and self-learning amongst students. Nevertheless, I should point out that “learning objects” do not necessarily have to be visual, but in my case they invariably are as I derive my theory simultaneously from both Berger and Wenger and have embedded both of them in my teaching methodology. Let me explain.

Wenger’s concept of communities of practice in effect synthesised in a very innovative manner prior research in the scholarship of learning and in particular two critical issues: first, the
constructivist approach in which learning derives primarily from activity as compared to the earlier views that highlighted the acquisition metaphor; and second, a move towards the centrality of the social context in the learning process and especially the concept of situated learning. It is in fact this anthropological concept of situated learning which Wenger combined with constructivism in order to generate the critical concept of communities of practice. Thus, for Wenger knowledge and especially critical thinking derives from our participation in a community of practice which engages with a particular task (i.e. a learning object). Furthermore, for Wenger participation is an active process through which meaning and knowledge is continually negotiated within the community of practice. In this respect participation is much more than collaboration or cooperation and in fact constitutes more of a learning experience derived from negotiating meaning within a community of practice (e.g. group work within a class).

It is from such a theoretical approach that I have formed a teaching methodology in which I categorically avoid attributing primacy to the delivery of content per se as I do not believe that it is capable of developing critical thinking. Once the acquisition metaphor has been debunked it is impossible any longer to sustain the conventional approach to teaching where the “sanctity of the content” is paramount. (see New Chalk Talk Volume 5, No: 5) Instead, the preferred teaching methodology is one which enables students to engage with particular tasks (learning objects) in order to make sense of that content and thus in the process develop critical thinking. Such activities, of course, are complimentary to the curriculum which is still delivered, but it is made clear to students that learning takes place in the engagement with the learning objects as such during group work both within and beyond the classroom. Thus, it is the student engagement with learning objects which provides the opportunity for them to negotiate knowledge through the process of participation in a community of practice that achieves primacy in my own teaching methodology.

Current scholarship of learning research argues quite forcefully that people are not motivated to learn per se, but are motivated to join a community of practice and thus a learning relationship exists only when we learn from or through others. “We know that learning is not a passive act. It involves active construction and reconstruction of ideas and experience, usually through a range of carefully designed activities.” (Alexander and Boud, 2001: 7) Thus, it is the design of such learning objects that constitutes the most important role of a teacher and the delivery of content as such. It is here that the professional quality of the educator is appreciated and of course what should constitute the focus of continuous professional development for faculty. Such learning objects, of course, do not necessarily have to make use of instructional technologies per se and neither do they have to focus exclusively on visual rhetoric. The fact that I make use of both in designing my own learning objects simply derives from the fact that I am also inspired by the seminal work of Berger and that I have come to appreciate the benefits to be derived from using instructional technologies. (see New Chalk Talk Volume 5, No: 6)

Designing appropriate learning objects is a highly complex and professional activity in which a variety of skills have to come together in order for them to achieve the desired effect of stimulating and enhancing critical thinking amongst students. For one the educator has to
possess a high degree of expertise in the respective area of knowledge in order to identify the key concepts that constitute critical learning for the students.

It should be pointed out that learning objects are also referred to sometimes as “bites of learning”, “learning packages” and/or “learning activities”.

Furthermore, the educator needs to be engaged with the scholarship of learning as such in order to appreciate and explore the different ways in which students can relate and engage with these key concepts and thus learn.

Finally, the educator needs the support of an instructional technologist if s/he will present these learning objects in a digitized format. Not to do so is to present students with learning objects whose quality will detract from the actual learning process. CLT, of course, is capable of providing such support to faculty at AUC and welcomes anyone who is interested in exploring the role of and/or producing learning objects for their respective courses.

**Sources:**


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Towards a Culture of Evidence (Part 1)
Developing and Writing Learning Outcomes
Dr Aziza Ellozy, Director, Center for Learning and Teaching

○ “Assessment is an ongoing process aimed at understanding and improving student learning. It involves making our expectations explicit and public; setting appropriate criteria and high standards for learning quality; systematically gathering and analyzing, and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance.” Angelo, Thomas. American Association for Higher Education Bulletin (1995): 79.

○ Assessment is the process of gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what students know, understand, and can do with their knowledge as a result of their educational experiences; the process culminates when assessment results are used to improve subsequent learning. (Huba, Mary, and Jann Freed, Learner-Centered Assessment on College Campuses: Shifting the Focus from Teaching to Learning. 2000)

Assessment may mean different things to different people, but in the context of higher education the common denominator in all definitions is the purpose to which it is aimed at: improving student learning. For our present purpose we will not be talking about assessment that aims at improving a program, but rather as an ongoing conscious and systematic process that provides us with continuous feedback on the effectiveness of our instruction. As such, it would continuously take place as an integral part of our courses while we are teaching them.

With this in mind, we can simplify the process along the following three steps:

<table>
<thead>
<tr>
<th>Assessment as continuous feedback = faculty and students focusing on learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develop the learning outcomes</td>
</tr>
<tr>
<td>2. Decide on the assessment methods and gather the information</td>
</tr>
<tr>
<td>3. Analyze the data, and use results to improve student learning</td>
</tr>
</tbody>
</table>

Developing and writing learning outcomes

The most important starting point is to write learning outcomes (LOs) for each learning unit. They help our students identify their goals and help us “measure” the success of our instruction.

Simply put, learning outcomes should address the question “What would students be able to DO at the end of the module, chapter or lecture that they could not do (or do as well) before?”
In other words, the LO should focus on student performance rather than on something that is in his/her head like “know about…”, “understand …” or “appreciate …”.

Statements such as “Students will learn to appreciate what makes good theatre” or “Students will understand the role of gender and cultural differences in communication” are not properly stated learning outcomes because they are not measurable.

Educators have developed a hierarchy of learning outcomes based on Bloom’s taxonomy (1956), which reflect increasing levels of complexity: **Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation** (although research has confirmed that the first four represent a true hierarchy, the hierarchical nature of the last two is debatable).

Each of Bloom’s levels has a series of action verbs that describe what to **do** at that cognitive level and can be very helpful when writing LOs. They are spelled out in the following table:

(From [http://www.brookes.ac.uk/services/ocsd/2_learntch/writing_learning_outcomes.html](http://www.brookes.ac.uk/services/ocsd/2_learntch/writing_learning_outcomes.html))

<table>
<thead>
<tr>
<th>Cognitive Level</th>
<th>Knowledge</th>
<th>Comprehension</th>
<th>Application</th>
<th>Analysis</th>
<th>Synthesis</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Define, describe, identify, label, list, name, outline, reproduce, recall, select, state, present, organize, recount, write, measure, relate, match</td>
<td>Interpret, translate, estimate, justify, clarify, defend, distinguish, explain, generalise, exemplify, infer, predict, rewrite, summarise, discuss, perform, report, present, indicate, find, represent, formulate, contrast, classify, express, compare, recognise, account</td>
<td>Apply, solve, demonstrate, change, compute, manipulate, use, employ, modify, operate, predict, produce, relate, show, select, choose, assess, operate, illustrate, verify</td>
<td>Recognise, distinguish between, evaluate, analyse, break down, differentiate, identify, illustrate how, infer, outline, point out, relate, select, separate, divide, compare, contrast, justify, resolve, examine, conclude, criticise, question, diagnose, categorise, elucidate</td>
<td>Arrange, assemble, organise, plan, prepare, design, formulate, construct, propose, present, explain, modify, reconstruct, relate, re-organise, revise, write, summarise, account for, report, alter, argue, order, select, manage, generalise, derive, synthesise, enlarge, suggest</td>
<td>Judge, evaluate, assess, discriminate, appraise, conclude, compare, contrast, criticise, justify, defend, rate, determine, choose, value, question, measure.</td>
</tr>
</tbody>
</table>

Ideally, learning outcome statements should include an *action* verb that defines what the learner should be doing, the *context* in which s/he will be doing it and a *measurable performance criterion*. Two examples follow:

- “Students should be able to carry on a conversation in French on a topic involving everyday life (weather, shopping, dining, likes and dislikes, etc.) for five minutes without mistakes that disrupt communication.”
- “Given a case study on a scientific experiment, students should be able to identify the independent variable, the dependent variable, the controlled variables, the control group and the underlying assumptions of the study.”

Finally, if we are to develop our students’ critical thinking skills; learning outcomes should not come from the lower levels of Bloom’s taxonomy, but should include: analysis, synthesis, and evaluation.

Our next New Chalk Talk issues will address “Formative Assessment and the Gathering of Information” and “Using Assessment to Improve Learning”.

**Sources**


Huba, Mary, and Jann Freed . *Learner-Centered Assessment on College Campuses: Shifting the Focus from Teaching to Learning*. 2000.


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Another very useful instrument that helps faculty identify their goals is the “Teaching Goals Inventory” (TGI) which can be found online at [http://www.uiowa.edu/~centeach/tgi/background.html](http://www.uiowa.edu/~centeach/tgi/background.html). This is a self assessment of instructional goals which helps faculty identify the priority of the learning goals that they have developed (developed by Thomas Angelo and Patricia Cross)
Towards a Culture of Evidence (Part 2)
Formative Assessment and the Gathering of Information

Dr Aziza Ellozy, Director, Center for Learning and Teaching

“If assessment is to improve the quality of student learning, and not just provide greater accountability, both faculty and students must become personally invested and actively involved in the process...Classroom Assessment aims to do just that by developing methods to bring the benefits of assessment into individual classrooms and under the control of individual teachers and learners.” (Angelo and Cross, 1993)

[Formative assessment] “occurs when teachers feed information back to the students in ways that enable the student to learn better, or when students can engage in a similar, self-reflective process.” (NCFOT, 1999).

In our last issue, we spoke of assessment as an essential process to improve student learning and to provide us with a continuous feedback on the effectiveness of our teaching. We discussed how to write clear learning outcomes as a first step, and promised to follow up with a New Chalk Talk issue that would address the issue of collecting appropriate information in order to evaluate student learning. To do this, we need to address two questions: what kind of feedback should be collected and how do we collect it?

Typically, feedback assessment information is collected using one of the direct and indirect methods shown in Table 1.

<table>
<thead>
<tr>
<th>Direct measures</th>
<th>Indirect measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common course homework</td>
<td>Course evaluations</td>
</tr>
<tr>
<td>Quizzes and examinations</td>
<td>Percent of class time spent on active learning</td>
</tr>
<tr>
<td>Term papers</td>
<td>Student reflective commentaries</td>
</tr>
<tr>
<td>Journals</td>
<td>Percent of students hours spent on service learning, homework etc</td>
</tr>
<tr>
<td>Case studies</td>
<td>Mid-semester surveys74</td>
</tr>
<tr>
<td>Portfolios</td>
<td>Small Group Instructional Diagnoses (SGID)2 etc.</td>
</tr>
<tr>
<td>Projects, capstone experiences</td>
<td>Poster displays and exhibitions etc.</td>
</tr>
</tbody>
</table>

*Direct measures* judge student work and demonstrate actual learning while *indirect measures* provide information related to the learning environment, to the learning process as well as to perceptions about learning. In most cases there is not one ideal assessment method, and the best way is to diversify the assessment techniques. The question is which ones?

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73 These are services offered by AUC’s Center for Learning and Teaching

74 Higher Order Thinking skills
Choosing the Assessment Methods

So, which data do we collect and what do we do with it?
To answer this question, we need first to distinguish between two types of assessments: a) those that are formative – i.e. they occur regularly throughout the course and help faculty find out what students are learning in the classroom and how well they are learning it. Preferably, they should not be evaluative or involve grading of students; and b) those that are summative which usually occur at the end of a learning module, semester or year and are used to evaluate an individual student’s performance. Referring to Table 1, most of the direct measures are of a summative nature, and while they can be and are used to improve learning, they provide no evidence of why students learn or do not learn. Among the indirect measures, mid-semester surveys and Small Group Instructional Diagnoses are definitely formative assessments and allow faculty to quickly adjust content or approach based on students’ perceptions.

What we advocate here is Classroom Assessment as defined by Angelo and Cross (1993), which is one of the most noteworthy formative assessment approaches. The approach allows for a continuous classroom “feed-back loop” where faculty collect feedback from students on their learning and then provide them with feedback and suggestions for improving it. Angelo and Cross (1993) have developed fifty such “Classroom Assessment Techniques” which are very effective. The most popular one is the Minute Paper, which has been described in a previous New Chalk Talk issue (Volume 1, Issue 2).

In summary, the steps would be to:

- Decide what you want to learn from a Classroom Assessment based on one of your learning outcomes (or on an assessable teaching goal as determined by your Teaching Goals Inventory. See footnote # 1);
- Choose any one of the “direct” assessment measures that provide this feedback or choose a Classroom Assessment Technique (CAT) that can be easily implemented in your class (see next New Chalk Talk issue);
- Explain the purpose of the activity to students and implement the task;
- After completion of the task, review the results and decide what changes, if any, to make;
- Let your students know what you learned from the exercise and how you will use this information;
- Have your students reflect on what they have learned and let them assess their own learning;
- Keep a record (recording and saving data electronically makes life much simpler!); and
- Adjust any necessary change based on the results.
Our next New Chalk Talk issue will illustrate some examples of classroom assessment and how it can help us understand and improve learning.

Sources


Towards a Culture of Evidence (Part 3)
Using assessment to improve learning

Dr Aziza Ellozy, Director, Center for Learning and Teaching

Following up on our original emphasis on assessment as an integral part of teaching, this issue (the last of this series) will be devoted to classroom assessment aimed at enhancing the learning and teaching experience through systematic formative assessment. Our previous recommendations included using Classroom Assessment Techniques (CATs) as developed by Angelo and Cross (1993). These CATs are simple tools for collecting data and using it to improve learning. These techniques are not meant to replace traditional forms of (summative) assessment such as exams, quizzes and term papers, but could supplement them in order to provide instructors with insights on student learning in-between such tests, and allow continuous effective feedback to students.

The table below has been adapted from Angelo and Cross (1993) and is designed as a practical "how-to" guide to a selection of Classroom Assessment Techniques. The techniques are described and are grouped under broad assessable goals. The specific feedback you will be getting is also included.

<table>
<thead>
<tr>
<th>Analytical skills</th>
<th>Application skills</th>
<th>Synthetic skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>(breaking down information or problems in order to better understand and solve them)</td>
<td>(applying knowledge to different situations)</td>
<td>(creating something new by integrating new with known information)</td>
</tr>
<tr>
<td>Content, form and function of texts (useful in courses focusing on communication or written forms)</td>
<td>As directed paragraphs (could be applied to any course)</td>
<td>Invented dialogues (useful in humanities and social science courses)</td>
</tr>
<tr>
<td>Analytic memos (could be used in economics, political science, environmental studies, management etc where the stakeholder needs student input for decision making)</td>
<td>Application cards (could be applied to any course)</td>
<td>Need journal (useful whenever students are expected to read carefully, works best when reading short texts (articles),</td>
</tr>
<tr>
<td>“What, How and Why Online” Students write in an outline format the “what” (content), “how” (form) and “why” (function) of a message which could be a news article, an essay, a speech, an ad etc</td>
<td>Ask students to paraphrase a theory, an equation or any specialized information in “plain English” so that the non-specialist can understand</td>
<td>Students are asked to invent a dialogue between historical figures synthesizing biographical information, historical context and issues. Could be written or enacted.</td>
</tr>
<tr>
<td>Students are asked to write a one-page analysis of a problem or an issue. They are to write the memo to a fictitious person embodying a specific role (e.g. employer, client)</td>
<td>Ask students to write one or more real world application for what they have just learned (or have them choose from a list of examples which ones apply to what they have learned)</td>
<td>Students summarize the entire topic on paper with a single word. They then write a paragraph or two to explain why they chose that word to summarize the text.</td>
</tr>
<tr>
<td>Assess students’ skills in applying analytical thinking</td>
<td>Assess your students’ ability to apply principles already learned to new problems and situations</td>
<td>Assess students’ skills in summarizing, retaining and communicating information</td>
</tr>
</tbody>
</table>

75 Values
76 Knowledge
77 Such as “Small Group Instructional Diagnoses” (SGID) or mid-semester surveys.
Some of these CATs are easier to administer than others. As a rule, Angelo and Cross recommend “that you 'get your feet wet' by trying out one or two of the simplest CATs” at first (like the Minute Paper).

After reviewing the results of your CAT, complete the ‘feedback loop’ by providing students with feedback information and/or suggestions for improvement. Let your students know how that information will affect what you do as the teacher and how it should affect what they do as learners (It is also always useful to allow them to reflect on what they have learned).

The authors emphasize that these techniques are to be used as starting points (ideas to be adapted and improved upon). We hope you will be encouraged to experiment with one of them in your classes and to share your experience with CLT. Should you need more specific support in implementing this type of assessment in your class, (or other types78) feel free to stop by the Center for Learning and Teaching (FLAC 212A) and talk to us.

Sources

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78 It should be pointed out that learning objects are also referred to sometimes as “bites of learning”, “learning packages” and/or “learning activities”.

Learning Objects: The Return of the “Visual” to Active Learning?
Dr. Pandeli Glavanis, Associate Director, Center for Learning and Teaching

In a recent issue of *New Chalk Talk* (Volume 6, Issue 2) I relied upon John Berger’s pioneering work *Ways of Seeing* (1972) in order to suggest the primacy of “visual texts” in the learning relationship and especially with regard to our continuous concern, as educators and facilitators of the learning process, to enhance critical thinking and self-learning. Upon reflection, however, I came to realize that I may have been using a massive-sized hammer in order to knock in a drawing pin. Let me explain.

Consider one of our science or engineering colleagues who has completed a conventional lecture to be delivered to undergraduate students. Consider the fact the she/he has paid careful attention to his audience, the style used, organization of thought, etc. Nevertheless, a final reading of the text generates a feeling of unease as she/he reads paragraph after paragraph and page after page and realizes that there are no graphics or visuals whatsoever. You will suspect a ruse now as you know only too well that it is practically unthinkable that this would actually happen. Scientific texts rely so heavily on “visuels” that in fact most scientists design the “visuels” even before engaging with the text, and in many instances the text is not much more than an elaboration upon the “visuels”. It is the various “visuels” that exemplify the research involved and the data that needs to be communicated; in graphs, tables, etc. Similarly, our colleagues in economics, art history, geometry, physics, chemistry, media studies and so on would find it impossible to communicate knowledge without some use of “visuels”. Thus, you would rightly ask yourselves what is the point of an issue dedicated to the use of “visuels” in learning! Of course you are right. From Euclid’s geometric forms and then to the most recent semiotic approach to the study of urban graffiti scholars have relied heavily on “visuels” of all forms in order to convey analytical accounts of our conceptual and physical environment. Nevertheless, I will argue below that there are two critical issues that still need to be addressed.

First, and despite the fact that we have made use of “visuels” as a vital element in our communication for centuries, since early cave drawings and graphics, we have yet to “master” the art of using “visuels” in communication. There are, of course, several exceptions such as in the area of art, media etc, but in general academic is far from being competent in the use of “visuels” for learning purposes. This is partially due to the fact as humans evolved and the primitive cave drawings and graphics became alphabets, we dedicated many centuries to perfecting written and oral communication; literature and public discourse. It is only recently that “visuels” have experienced a re-birth, and this has coincided with two significant developments: the dramatic expansion of digitized modes of communication (ICT) and the enhanced respectability within the academic of epistemologies relying upon semiotics and post-modernist conceptual frameworks. Thus, it can be argued that we are presently only at the portal of a new and unexplored communication arena where conventional textual and oral forms are already being challenged by a large variety of “visuels” and the end result...
cannot be foreseen. Let us be inquisitive and enter the arena in order to witness at firsthand the forthcoming grand spectacles.

Second, there is presently a significant confusion in the minds of many in academia and beyond, as to what “ visuals” are. In fact, the confusion is so acute that many use a number of different terms such as “ visual”, “ visual rhetoric”, “ visual literacy”, “ graphics”, “ image”, “ graphic design”, etc. interchangeably and with little or no appreciation that they signify very different approaches and methodologies. This, of course, inhibits the development of better skills in the use of “ visuals” or for that matter a better understanding required in different disciplines and circumstances. “ Visual rhetoric”, for example, is a very recently developed analytical framework which does contrast the visual image to the text and oral form, but also draws on semiotics and thus acknowledges such images as rational expressions of cultural meaning (Handa, 2004). As such it demarcates a new disciplinary space within academia for scholars who have a specific interest in looking at non-textual artifacts when exploring complex social reality. Therefore, it is clear that it has little to offer a scholar who wishes to use “ visuals” in order to illustrate how molecules in motion in effect constitute nanomachines. Furthermore, it is of little help to an instructional designer who wishes to use both visual and graphic material in order to assist an economics professor to convey complex, conceptual issues related to what is money, how depreciation is calculated, etc.

It is beyond the scope of a very short essay such as this to attempt to elaborate on the various and in some cases contested definitions of what all the different terms noted above actually mean or reflect in academic practice. Nevertheless, it is possible to identify one particular use of “ visuals” and indicate how it can enhance learning without reference to semiotic theory or any other complex, analytical frameworks. In fact it can also be suggested that for those of us who have yet to “ plunge” into the ocean of “ visuals,” it is possibly best that they are used solely as illustrations of textual material and/or as a means of enabling us to “ see” what the human eye is unable to see, such as nanomachines (chemistry & engineering), black holes (mathematics & physics), landscapes (topography), etc. Furthermore, “ visuals” (both static and dynamic) can also enhance learning in such areas as language acquisition, history, economic trends, voting patterns, etc. Here, “ visuals” are used in order to elucidate a particular issue or concept and as such, the “ visual” is in fact a virtual image of what we have already acknowledged as being reality through research. In other words, the “ visual” does not itself constitute a problem requiring deconstruction and analysis. This, of course, is very different from “ visual rhetoric” or “ visual literacy” which are disciplinary approaches to the study and understanding of social reality.

It is for the above reasons therefore that is best to refer to such “ visuals” as “ learning objects” and move away from the fact that they may well involve visual or graphic material. “ Learning objects” in whatever form or shape are intended to facilitate and enhance the learning process itself and thus need to be carefully “ designed” in order to achieve this objective. Furthermore, not all concepts or aspects of social reality can be illustrated or exemplified in a “ learning object” and thus it is critical to consider carefully can be. Thus, it is possible to suggest that the use of “ learning objects” follows a process which starts by a faculty person identifying a concept, an aspect of social reality, a chemical process, etc., that
s/he wishes to elucidate further. Furthermore, the faculty person needs to identify what are the “learning outcomes” to be derived from students engaging with such a “learning object”, and then it can be designed in order to achieve both objectives. Thus, it is the design of such “learning objects” that constitutes the most important role of a teacher. It is here that the professional quality of the educator is appreciated and of course what should constitute the focus of continuous professional development for faculty.79

Designing appropriate “learning objects” is a highly complex and professional activity in which a variety of skills have to come together in order for them to achieve the desired effect of stimulating and enhancing critical thinking amongst students. Not to do so is to present students with learning objects whose quality will detract form the actual learning process. CLT, of course, is capable of providing such support to faculty at AUC and welcomes anyone who is interested in exploring the role of and/or producing “learning objects” for their respective courses.

Sources:

79 I am indebted to Dr Suzanne Massoud from Arabic Language Institute for sharing with me her pioneering work in developing a VLO for teaching the Arabic alphabet
Visual Learning Objects: Enable Faculty to Focus on Active Learning
Dr. Pandeli Glavanis, Associate Director, Center for Learning and Teaching

In two recent issues of *New Chalk Talk* (Volume 6, Issue 2 & 6), I suggested that “learning objects” enhance active learning and that “visual learning objects”, in particular, contribute significantly to the learning relationship. In this issue, I wish to elaborate on how such “visual learning objects” are the key element that liberate faculty from having to design and construct their own demonstrations and illustrations (re-invent the wheel) in their respective courses and thus enable them to focus on critical and active learning instead. “Well”, you might say to yourselves, “what is this new brave world where critical and active learning is practically ensured?” Furthermore, you might go on to say, “if only we knew what they were and how to use them we may even get several of them from CLT for our courses.” Thus, let me explain so that you may in fact make use of them and enhance your teaching so as to achieve active learning.

Visual Learning Objects (VLOs) have recently emerged as a new concept within the field of instructional technology and have generated a significant debate that is premised on the belief that it is possible “to create independent chunks of educational content that provide an educational experience for some pedagogical purpose” (Quinn, 2000). Longer definitions of such objects suggest that “the main idea of ‘learning objects’ is to break educational content down into small chunks that can be reused in various learning environments, in the spirit of object-oriented programming” (Wiley, 2001). Furthermore, the current debate identifies certain characteristics of such objects which can be summarized as follows:

- Learning objects are a new way of thinking about learning content. Traditionally, content comes in several-hour chunks. Learning objects are much smaller units of learning, typically ranging from 2 minutes to 15 minutes.
- Are self-contained – each learning object can be approached independently.
- Are reusable – a single learning object may be used in multiple contexts for multiple purposes.
- Can be aggregated – learning objects can be grouped into larger collections of content, including traditional course structures (Wisconsin Online, 2001).

The essence of the above is that knowledge or learning can be achieved via “small chunks” constructed in a virtual reality, and can be used in different learning contexts and across multiple disciplines that cut across specialized and targeted course content. As such, this does constitute an important shift in pedagogy since it suggests that some knowledge is not necessarily associated only with specified course material but is in fact generic and “independent” of particular courseware or disciplinary boundaries. For example, a virtual flash animation of a tsunami is an independent chunk of knowledge that can be used in a variety of courses in geography, oceanography, etc., in order to illustrate this natural phenomenon.
In this sense VLOs do constitute a significant new innovation in contemporary pedagogy as they invite faculty to choose from a plethora of ready-made chunks of knowledge in order to illustrate particular concepts within their respective and specialized courses. This, of course, has a number of associated benefits of which the most important is that faculty are now able to focus more on analytical and critical thinking rather than the tedious activity of constructing their own individual demonstrations at each and every learning situation. Furthermore, such VLOs can be made available for individual as well as group learning and can be used within and beyond the classroom. For example, a complex VLO that illustrates the particular characteristics of the Arabic alphabet and script (from right to left and how letters can be elongated or shortened), can be used in a variety of Arabic language courses and can also be used by students wishing to learn on their own time. Arabic language teachers can then concentrate on other aspects of teaching the language rather than the mechanics of recognizing the script.

Assuming that such VLOs are compatible with existing learning technologies and learning management and operating systems they also contribute to significant savings in resources. Practically, every introductory Arabic language course has to face the dilemma of how to teach non-Arabs the fact that the Arabic language is written from right to left. The availability of a VLO which achieves that, independent of the type of course or approach to teaching the language, is a major benefit. It reduces dramatically development costs as the VLOs are available “on the shelf” so to speak. Clive Shepherd, for example, predicts that development costs will drop from 50-80% (Shepherd, 2006). This, of course, is appreciated by any academic institution struggling to maximize added value from shrinking resources. Furthermore, well designed and constructed VLOs gain commercial value and can in fact add resources to the institution or department that produced them. As with textbooks, VLOs will compete in the market and thus academia will be the beneficiary as better, more sophisticated and cheaper VLOs become available.

“Wow!” I hear you saying. Are we to let instructional technologists completely take over education? Well, programmers like to think that they are the main and sole source of such VLOs and that it is they who in fact have contributed to this new approach to learning. Of course, they are wrong. The uses of Learning Objects and Visual Learning Objects for educational purposes are more than 50 years old. LEGO and MECANO existed even when I was a child and the educational purpose behind these objects was exactly the same as it is today: to enable children of different ages, playing alone or in groups, to learn from the way in which they assembled the different objects and thus construct complex items such as fire engines, houses, etc. The use of objects in learning, therefore, is not new and we as children and/or parents have already acknowledged their value. What is it that stops us from making such objects, albeit in digitized formats now, the cornerstone of our learning architecture?

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Shepherd among others argues that the problem is more cultural and psychological. He suggests that “so much of our experience of media and learning events is essentially sequential” (Shepherd, 2006). TV programs, lectures, classes all have a start and a clearly identified end, whereas VLOs have no start and no clearly defined end. They are part of a wider learning process. When a child is given several pieces of LEGO blocks it is impossible to predict what will emerge at the end. We are unable to control what will be produced, but we are certain that a learning experience does take place. In this respect it is a different pedagogic paradigm which, although available for several decades, is only just now becoming accepted in academia. As teachers we have to acknowledge the learning potential of “objects” whether visual, virtual, digital or physical and allow our students the opportunity to experiment, explore and learn. Our task is to select the best available objects from the shelf and then focus on the critical and analytical dimensions of their use in our respective courses. CLT, of course, is more than happy to help faculty choose such learning objects and/or assist in constructing them if they are not available on the shelf.

Sources:


New Initiative: “Clickers” In Our Classrooms

Dr. Aziza Ellozy, Director, Center for Learning and Teaching

- To draw the attention of 200+ students from 6-7 different sections assembled in Ewart Hall, the lecturer of one of the ‘General Lectures’ of “Scientific Thinking” announces that there will be a competition between the sections at the end of the lecture. When the time comes, student representatives from each section are asked to answer one or two multiple choice questions by “clicking” the correct answer projected on the PowerPoint slide on the screen using small handheld devices (clickers). A histogram appears with the results and another one follows with the scores of the teams: the winning team cheers and an animated discussion takes place. The competitive spirit motivates many students to concentrate on the lecture and the instantaneous feedback allows them to clarify misconceptions to one another.

- In a Construction Engineering class, the instructor uses the same devices together with peer instruction techniques to review material at the end of each module and/or to prepare for a quiz. Anonymity and immediate feedback encourages students to participate safely and allows for discussion around each question.

- An Economics instructor tries the same approach and finds that his students perform better on the quiz and ask him to use clickers again for future reviews.

- Another Economics instructor uses clickers to evaluate the impact of a “simulation” on her students’ understanding of certain concepts using pre- and post-testing.

- A History instructor designs a graded team-based quiz in the format of “Jeopardy,” a popular TV gameshow. He uses clickers to determine individual scores and team scores instantaneously.

- An Arabic Studies instructor uses them to collect demographic information on his students and test their pre-course knowledge. With this information he hopes to adjust his teaching to his students’ preparation and to address any preconceptions they come to class with. A post-class test allows him to quickly assess if he has met his learning goals.

- A “Writing Program” instructor uses them to assess the use of “blogs” in his course and an instructor in a Core Curriculum course has her students vote for best argument in a debate.

These are just but a few examples of the many creative ways our faculty, with the support of the Center for Learning and Teaching, are using this technology to promote active learning and/or to assess how effectively they teach.

So what are “clickers”?

Also known as personal response systems (PRS), clickers look like small remote controls which each student uses to key in their answers to a multiple choice question initiated by the instructor and projected on a screen. These clickers are coupled with a receiver on the instructor’s computer and when students “click” their answers, the results are saved in a data file which can be displayed as a histogram. Individual student data as well as collective class data are saved for each session. Software allows the students’ responses to be recorded, analyzed and graphed.

How can you use them?
Like any other technology, using clickers in the classroom does not guarantee that your students will be more engaged or that they will learn better. Successful implementation requires careful planning and a clear link to learning goals and outcomes.

Clickers work especially well with peer instruction, an active learning method which has been particularly well-documented in physics education and which has been extensively and successfully used in other branches of science and engineering (Wood 2004). It has also been adopted and adapted in any course where conceptual understanding is important. It boils down to asking thought-provoking questions (ConcepTests) on the screen to which students choose an answer. If the class is split among several different answers the students are asked to turn to their neighbors and convince them of their reasoning. After another one or two minutes they are asked to record their revised answer. After the discussion, the number of correct answers typically rises significantly. As learners, we know that explaining something to somebody else is a great way to develop our own understanding.

To summarize, clickers could be used to (adapted from Duncan, 2005):

- Promote interactivity and discussion in class
- Measure what students know before you start to teach them
- Test students’ understanding
- Find out if they’ve done assigned readings
- Provide immediate feedback
- Administer an effective review session
- Measure students’ attitudes
- Discuss diverse points of view when there is no correct answer (ethics)
- Allow students to express their knowledge without having to worry about giving a “dumb” answer

**Why would you use them?**

Many articles have been written about clickers and how they enhance the learning experience (Wood 2004, Siegel et al 2004, Duncan 2005). At the very least, this technology helps students quickly assess their understanding and focus on what needs improvement. The common consensus among the many studies and experiences of students and faculty is that class interaction and engagement are enhanced. In a large study at the University of Amherst (Duncan 2005, p10), 75% of students strongly agreed/agreed that clickers increased their interest and enjoyment. In a more recent study at the University of Wisconsin’s four campus...
system involving 3500 students in 28 courses and 19 disciplines, 93.5% of faculty strongly agreed/agreed that students were more engaged and 72% strongly agreed/agreed that clickers benefited learning.

Like with any technology, clickers can facilitate learning if applied thoughtfully. In this case the design of the questions is the most important aspect. The Center for Learning and Teaching is promoting the use of this user-friendly technology because of the demonstrated pedagogical benefits and effectiveness. For this purpose, we are piloting them in as many courses as we can with the ultimate objective of transferring the responsibility of buying and administering their use to the individual departments.

Should you wish to try out this technology in your course, call the Center for Learning and Teaching (Ext 6659 or 6635) to make an appointment with one of our staff members.

Sources:


Role-Playing in Class: Animates Discussion and Enhances Active Learning
Dr. Pandeli Glavanis, Associate Director, Center for Learning and Teaching

As a social-economic historian by training I always respected and admired the work of the French Annales School, and especially the way in which such historians as Marc Bloch and Lucien Febvre, among others, brought life into historical research and accounts and practically presented vivid almost visual representations of life in epochs long past. They dared to step into the bedroom, the kitchen, the salon and the mentalités of historical actors. In so doing these historians present historical events through the mentalités of those that lived them but without fetishising the otherness of such historical actors. Role-playing asks students to also see the past, or for that matter, the present as did those who lived and acted during these events. By focusing on the details of human relationships students are able to grasp the “humanity” of historical actors and thus comprehend in a dynamic manner the structures, parameters and limitations within which such actors acted. Active and critical learning is enhanced as students are able to see that history and historical acts are not inevitable or predefined, but a result of the way in which chaos, disorder and turbulence articulate and produce actual happenings. It is this critical skill of moving beyond the sense of historical inevitability invariably communicated in scholarly texts that students gain from role-playing and which cannot be “taught” via the medium of a traditional lecture or seminar. Let me elaborate.

Role-playing forces students to search behind the events themselves and consider how and why certain actors presented and defended particular perspectives or positions, the multiplicity of different perspectives that were in fact presented in such events, and of course what enabled some perspectives to gain influence and privilege over others and thus shape the course of history. In some respect this is in fact a form of “enactive representation” or a form of “involved advocacy” rather than role-playing per se, but what it actually achieves is critical thinking on the part of the student (Tumblety & Skinner, 2004). In fact Tumblety and Skinner argue that

“...educational researchers have argued that role-play sharpens students’ analytical and presentational skills, builds confidence, encourages a shift from ‘fact to factors’ in their investigation of historical problems, and allows students to think beyond the accepted versions of historical developments as they imagine the available choices and mental frameworks which restricted the actions of historical agents” (Tumblety and Skinner, 2004: 2).

Of course there are additional benefits to be drawn from the use of role-playing as a strategy to enhance critical learning. For one it contributes significantly to active and animated class discussion in which practically all the students participate. Furthermore, it encourages task-based learning in that students are encouraged to consider the “facts’ and then construct for themselves the way in which actors or agents of history would have responded and why they did respond in particular ways. This also encourages group work and collaborative learning.
as students are divided into small groups and given the tasks to prepare and then present. Finally,

it enhances presentation skills as students are encouraged to present their “positions” in the manner in which they feel will gain the maximum support from their peers.

Role-playing has been used more extensively by historians, but is by no means confined to this discipline. Practically, any of the humanities and social science disciplines are able to make use of such a teaching/learning strategy. In economics, for example, virtual reality stock exchanges derive from such a methodology and virtual or mock UNs or Arab Leagues are no more than an evolved form of such a strategy. They are formats which have also resolved to some extent one of the key issues in using role-playing in class: the problem of minimizing the performative dimension and the theatrical division between those acting out the role-playing and the audience (Tumblety and Skinner, 2004). These are critical issues and those embarking on the use of role-playing need to ensure that the seminar or class is transformed into a theatre stage.

In this respect it is important to highlight another important issue related to the use of role-playing in class. Most educational research suggests that role-playing is a teaching/learning technique which enhances student understanding of events and moments in history, but not necessarily the way in which such events were resolved. The resolution of historical events is already known through the texts students read and thus allows minimal flexibility for creativity or critical thinking on the part of the student-actors. The texts highlight the process by which events are resolved and students need to read and grasp this by a variety of other learning strategies. To understand the events themselves and the positions adopted by various agents requires a different learning strategy and here role-playing can contribute. In fact, Tumblety and Skinner note that

“Pedagogically, these two approaches are quite different: in the former [resolution], students learn about processes (of government, of custom and ritual, of sociability) in order to understand the possible scope of a historical protagonist’s action in a given set of circumstances, while in the latter [understanding] they learn about positions actually taken by historical protagonists (in a debate or trial, in times of war, in politics) in order to understand the reasons for those positions” (Tumblety and Skinner, 2004: 11).

The above is a key issue in the use of role-playing as a strategy for classroom teaching and needs further elaboration. What in fact is being highlighted is that role-playing is not a substitute for reading texts or gaining knowledge of events. In fact, Tumblety and Skinner conducted a four-year experiment in the use of role-playing and concluded categorically that it did not help students gain higher marks or better overall academic performance. On the other hand, they note that

“...role-play is a highly effective means to increase the quantity and quality of student participation in discussion and to increase students’ close engagement with primary source material. It may also, in some contexts but not in others, lead to an increased student interest in a topic.” (Tumblety and Skinner, 2004: 3)
Thus, we can conclude that role-playing contributes to a better understanding of events or in other words to critical thinking and of course learning about how and why agents of history in fact took particular positions which thus lead to particular resolutions of historical events. In this respect it is clear that role-playing can and does enhance active learning, but only within a particular teaching/learning strategy which seeks to ensure that students can practically “visualize” the constraints and structures within which agents acted. In other words, it is an ideal methodology for enhancing a critical awareness of the historical process and that history is not inevitable. This, of course, sharpens students’ critical skills and active learning.

Role-playing in class is an exciting teaching/learning strategy that research has shown to enhance active student participation and to enable active learning to take place without necessarily implying a significant improvement of academic performance as such. Nevertheless, its benefits outweigh its limitations and thus worthy of a trial. As such it might be appropriate to conclude with the four golden rules of role-playing sessions:

that the students have background knowledge of the topic, however superficial, but preferably through reading sources; that the role-play is based on an ‘adversarial relationship’; that it is based around a ‘focal point for debate’ and that the tutor intervenes only minimally in order to ensure flexibility for the students. (McDaniel, 2000: 359)

Sources:
Tumblety, Joan and Skinner, Trish (2004), Evaluating Role-play in History Teaching, found at http://www.hca.heacademy.ac.uk/resources/ TDG/reports/tumlety.php

Experiences with Role-Playing in Class at AUC
Cynthia May Sheikholeslami, English Language Institute

I would like to add some remarks following the March 13th, 2007, issue of New Chalk Talk about "Role-Playing in Class" by Dr. Pandeli Glavanis, Associate Director of CLT. As an instructor in the English Language Institute, I have been used to using many classroom role-play activities, as this is a commonly used technique in foreign language teaching. However, as these are usually fairly superficial and the roles are not very 'meaty', they do not engage students very fully, despite allowing for a more student-centered approach to the classroom. They are not as invigorating for the faculty facilitator either.

During the past two years I have become familiar with a more in-depth approach to role-playing through the "Reacting to the Past" series developed under the auspices of Barnard College, Columbia University, New York City. I have adapted and used with my IEP advanced intensive classes two of the six of these 'games' published so far, "The Threshold of Democracy: Athens in 403 BC," and "Galileo and the New Cosmology," and I have also met with other AUC faculty to discuss adapting this approach to 'games' of their own devising, which they have done successfully. I am currently developing my own 'game' related to cultural heritage issues, entitled "Royal Mummies."

To the benefits of role-playing identified by Dr. Glavanis, I would add that students enter a 'liminal' space in which they can argue positions that may in fact be quite inimical to their personal beliefs through the mouth of the persona they inhabit in the role-play game (see Carnes, 2004). This is quite useful when students have many culturally ingrained preconceptions and sensitivities, as is often the case with AUC students. Students' emotional engagement with their roles 'forces' their participation in the classroom debates (see Carnes, 2005; Houle, 2006), and faculty can often match students with roles that suit their personalities and give shy students time to work up to active participation by giving them a little more time until they are expected to appear 'on stage'. In short, I can attest that role-playing works at AUC.

Dr. Glavanis pointed out four 'golden rules' of role playing: (1) students should have background knowledge of the topic; (2) the role play should be based on an 'adversarial relationship'; (3) the role play should have a focal point for debate; and (4) there is minimal intervention from the instructor. As the result of my experiences with the "Reacting to the Past" series and experimenting with them in my classes at AUC, I would like to add six additional 'rules' to this list:

1. students should have a substantial part of their grade based on the 'Game', otherwise they will not take it seriously;
2. students need guidelines for their roles and strategies, but should research information to develop them more fully, as a role that is too well defined will lead to rote repetition rather than engagement in developing the 'character' of the role;
3. there should be specific 'victory objectives' for the multiple 'factions' and individuals during the adversarial playing of the 'game';
4. the instructor-facilitator should provide guidance into the source materials (preferably available online) students will research for the game, and read and discuss some key texts in class before playing the 'game';
5. even though the instructor-facilitator should be away from the action in class, it is helpful to pass notes to the students to briefly suggest strategies they may employ or opponents to respond to during the heat of the 'game';
6. Students should be required to write out, in various formats, material that will support their positions, and be encouraged to share these with other players in the game to deepen the argumentation and persuasion that occur in the classroom.

The "Reacting to the Past" series has an active online faculty forum, which I found a very helpful for peer support and discussion. For me, working with students playing these games has been an exhilarating intellectual and teaching experience, and I would highly recommend it as a means of refreshing oneself in the classroom.

Sources:


"Reacting to the Past" website: http://www.barnard.edu/reacting
I would like to welcome you all to the new academic year with this first issue of our 2005/06 “New Chalk Talk” newsletter series. In a few days, we will also be sending you a supplement with the list of workshops CLT will be offering this semester and their descriptions. I hope you will join us and contribute to the rich discussions that usually take place during these workshops.

Critical Reading: A Guide for Your Students
Dr. Aziza Ellozy, Director, Center for Learning and Teaching

As is often the case, what we write about in this newsletter is inspired by the experience of one of our faculty members. This is one of those instances and, because it is directly related to improving the critical thinking/reading/writing skills of our students, we think that other AUC teaching faculty may find it useful.

Last semester, Professor X was faced with a class of juniors and seniors, whose performance in reading and critiquing articles/texts was frustratingly inadequate. This semester, Professor X is trying different approaches, including making use of a simple two-page guide, which the Center for Learning and Teaching was asked to prepare. It is this guide that we are publishing here.

How to Read Critically

In General
- When reading a text avoid looking only or primarily for information.
- Rather, look for ways of thinking about the subject matter: how the evidence is used and interpreted, how the author reaches his/her conclusions, etc.

Practical Suggestions
1. Begin by skimming the article/text to get an idea what the author seems to be saying.
2. Check the meaning of unfamiliar terms.
3. **Highlight** the argument, not information: i.e. highlight those places where the author uses concepts, theories, data, etc. and note how she/he uses them to support a point, a thesis or come to a conclusion.
4. **Re-read** slowly and more carefully looking for and asking questions about:
   a. The author’s main thesis:
      - What is the main point the author is trying to make?
      - What is the purpose or central claim of the text/article?
   b. The context:
      - In what cultural, historical, political context was it written?
      - Why did the author write this?
      - Who is the audience? Is it hostile or friendly?
   c. The kind of reasoning the author uses:
      - Are certain concepts, theories or methods used?
      - How are they used to interpret data, evidence?
• How are they used to support the main thesis?
  d. The evidence the author uses to support an argument
     • Is the evidence statistical, historical, literary?
     • What kinds of sources are used? Are they primary or secondary sources?

5. If you have done all this so far, your reading is already critical, but you will need to go further and **evaluate** the argument and the supporting evidence. For this you will need to:

   a. Recognize what has been left unsaid by:
      • Distinguishing between a statement of fact and a statement of opinion.
      • Recognizing underlying assumptions; are they explicit (stated) or implicit (hidden) assumptions?
      • Recognizing bias, i.e. noting the presence and nature of a writer's or speaker's prejudice.
   b. Assess the strength and weaknesses of an argument.
      • Why is it strong? Could it be better?
      • Is the supporting evidence good?
      • Could the evidence be interpreted differently?

**Sources**


“Reading History.” Retrieved September. 15, 2005 at [http://www.york.ac.uk/depts/hist/res/skills/read](http://www.york.ac.uk/depts/hist/res/skills/read)


“The Critical Thinking Rubric” *

Dr. Aziza Ellozy, Director, Center for Learning and Teaching

“...in all cases where critical thinking is desired, students need to explicitly and consciously use criteria to assess their own thinking and that of others.” (Broadbear, 1-8)

Last issue, we published a guide for your students on how to read critically. Because experts recommend providing them also with criteria for assessment of critical thinking, we have chosen to share with you the Critical Thinking Rubric developed by Washington State University's “Critical Thinking Project,” a rubric that has been commonly adapted in several U.S. universities. You may find it helpful to adopt, simplify, or adapt parts of it to the needs of your class.

1) Identifies and summarizes the problem/question at issue (and/or the source’s position)

Scant
• Does not identify and summarize the problem, is confused or identifies a different and inappropriate problem.
• Does not identify or is confused by the issue, or represents the issue inaccurately.

Substantially Developed
• Identifies the main problem and subsidiary, embedded, or implicit aspects of the problem, and identifies them clearly, addressing their relationships to each other.
• Identifies not only the basics of the issue, but recognizes nuances of the issue.

2) Identifies and considers the influence of the context on the issue.

Scant
• Discusses the problem only in egocentric or socio centric terms.
• Does not present the problem as having connections to other contexts-cultural, political, etc.

Substantially Developed
• Analyzes the issue with a clear sense of scope and context, including an assessment of the audience of the analysis.
• Considers other pertinent contexts.

3) Identifies and assesses the quality of supporting data/evidence and provides additional data/evidence related to the issue.

Scant
• Merely repeats information provided, taking it as truth, or denies evidence without adequate justification. Confuses associations and correlations with cause and effect.
• Does not distinguish between fact, opinion, and value judgments.
Substantially Developed
- Examines the evidence and source of evidence; questions its accuracy, precision, relevance and completeness.
- Observes cause and effect and addresses existing or potential consequences.
- Clearly distinguishes between fact, opinion, and acknowledges value judgments.

4) Identifies and considers OTHER salient perspectives and positions that are important to the analysis of the issue.
**Scant**
- Deals only with a single perspective and fails to discuss other possible perspectives, especially those salient to the issue.

Substantially Developed
- Addresses perspectives noted previously, and additional diverse perspectives drawn from outside information.

5) Identifies and assesses the key assumptions.
**Scant**
- Does not surface the assumptions and ethical issues that underlie the issue, or does so superficially

Substantially Developed
- Identifies and questions the validity of the assumptions and addresses the ethical dimensions that underlie the issue.

6) Identifies and assesses conclusions, implications and consequences.
**Scant**
- Fails to identify conclusions, implications, and consequences of the issue or the key relationships between the other elements of the problem, such as context, implications, assumptions, or data and evidence.

Substantially Developed
- Identifies and discusses conclusions, implications, and consequences considering context, assumptions, data, and evidence.
- Objectively reflects upon their own assertion.

7) Identifies and presents the STUDENT'S OWN perspective and position as it is important to the analysis of the issue.
**Scant**
- Addresses a single source or view of the argument and fails to clarify the established or presented position relative to one's own. Fails to establish other critical distinctions.
Substantially Developed

- Appropriately identifies one's own position on the issue, drawing support from experience, and information not available from assigned sources.

Sources


“Making the Case for Visual Rhetoric”
Moving Towards a Language of Teacher Inquiry for Advanced Visual Literacy

Dr Doris Jones, Writing Instructor, Rhetoric and Composition – Writing Program

During the 1st Session of the 109th Congress, the United States Senate passed S.Res. 39, “apologizing to the victims of lynching and the descendants of those victims for the failure of the Senate to enact anti-lynching legislation” (U.S. Senate). This historic apology was initiated by Senators Mary L. Landrieu (D-LA) and George Allen (R-VA), who after reading the book Without Sanctuary: Lynching Photographs in America, were motivated to introduce legislation. Edited by James Allen, the book is a 350-page pictorial chronicling lynching in America from 1850-1960. Speaking at a press conference following the passage of the resolution, Senator Landrieu commented “the impact of the pictures was overwhelming and proved to be very educational and an emotional experience for me. The more I learned about this terrorism in America, the more committed I became to doing something positive and passing this legislation” (Landrieu). At one moment in history, these photographs of charred, mutilated bodies, hanging from trees, were semiotic of social and political retribution for a society that displayed unmitigated cruelty (Sontag, 2004). More than 100 years later, these same images are the cause of a political apology to rectify a grave human injustice. Consequently, these visual texts can be seen as a social codification in which the author and the reader shared a common historical moment (Tompkins, 1976). Within this context, our increasingly visual culture has repositioned the image as the primary literacy for the 21st century (Burmark, 2002). The pedagogical challenge for the classroom is to implement interactive visual cues that will stimulate student cognition beyond their passive receipt of visual information.

In the composition classroom, students often become excited when photographs, movies and graphics of many types are used to complement visual literacy. However, enthusiasm often dissipates as students soon realize they must perform analysis and find cogent arguments in visual imagery. The fact that our culture is so deeply visual, students should be explicitly encouraged to interact with images to gather greater facility in interpreting and analyzing them (Eichbauer, 2003). Considering the relevance of visual thinking as a basic cognitive process, it is no surprise many scholars of composition and communication heed the call for instructors to integrate visual literacy into text-based writing assignments (Berger, 2003). Furthermore, scholars such as Dianna George have emphasized the cultural significance of visuals as a strategy for implementation in the classroom (Dropping Bread Crumbs). According to George, literacy, as it is defined in composition pedagogy is:

... intimately connected to intertextuality as an awareness and understanding of the relationship among texts and between texts and readers, (so that) literacy is never fixed or finished. Instead, it entails an ongoing re-evaluation and reformulation of the cultural and textual terrain as that terrain itself, including the position of readers, shift (124). This intertextuality George refers to exists between words and images and the social spaces, which includes time and place wherever one encounters them.
Visual images, whether they are television advertisements, billboards, or symbols of instruction at a train station, are pervasive in our culture. What is relevant for our students to understand is how images are representations in social spaces and their interpretation requires close analysis and argument. Therefore, students must acquire critical thinking skills to read and guide them through this avalanche of visual stimuli.

Sources


Eichbauer, Heidi L. “Reading and Writing the Image in the Composition Classroom.” MI: Wayne State University, 2003.


CLT's New Initiative: Mid-semester Feedback for Instructors

Dr. Aziza Ellozy, Director, Center for Learning and Teaching
Maha Bali, Instructional Technologist, Center for Learning and Teaching

For many reasons, end-of-course evaluation data are not enough. They come in too late to benefit the students doing the evaluation and they do not give us the details we need. They are a one way communication, and students do not believe they make a difference. Feedback activities during the semester are much more effective, and faculty who use these techniques learn more about how to improve their course than they would from end-of-semester evaluations¹.

Over the past year and a half the Center for Learning and Teaching has conducted Small Group Instructional Diagnoses² (SGID) for 36 courses and faculty members have been highly satisfied with the results. However the method is time consuming and labor intensive, and although we continue doing these SGIDs, we have now started a new initiative that also helps you get feedback from students in time to make adjustments for the remainder of the semester. Basically we meet with you and find out what kind of feedback you want. We have a sample questionnaire that we can adapt, or we can start one from scratch to meet your needs. We then administer your survey through WebCT (anonymously). After compiling and analyzing the responses, we send you a report, usually within less than a week.

Here are some comments from faculty members who have used these mid-semester surveys and from students

- “I hope it encourages a lot of other instructors to do mid-semester surveys. I know it’s the most useful means I’ve encountered of improving teaching methods and student-teacher rapport”
- “You can quote me with my name. It is a great service that you are providing to professors. And I have already told several professors to contact you…” (Dr. Vikash Yadav, Political Science)
- “Wow! This is really excellent and very useful. I am sure the comments in the … will be tougher, but I am delighted to get such feedback in the middle of the term.”
- “I am so happy to have such detailed responses. And the most encouraging thing is that the students seemed so willing to participate! Great feedback.”
- “… It makes me as a student feel comfortable that the doctor is giving me a chance to express myself”.
- “… it allows students to become more involved in the course. It also shows that professors respect the students’ opinions and requests by taking them into consideration.”

If you’re interested in a mid-term survey, please email us at bali@aucegypt.edu or call Maha Bali on ext. 6635

Sources
Beyond the “Sanctity of the Content”: E-portfolios

Dr. Pandeli Glavanis, Associate Director, Center for Learning and Teaching

Conventionally teaching takes place by reference to “faculty-centered instruction in the oral tradition” which involves the delivery of content via lectures. This is invariably also accompanied by an emphasis on an instructional discourse which features an almost sacred approach to “content” and thus a preponderance of “listening is learning” as the preferred methodology for teaching. (Oblinger and Rush 1997) In this respect and during the last few decades such conventional teaching methodologies which presume “telling is teaching and listening is learning” have had to face the problem of how to cope with the explosion of “new knowledge” emerging daily from the academy. Thus, given the preferred teaching methodology, it is not surprising that the invariable response of most faculty to the increasing quantities of knowledge and the collateral compression in the half-life of prior knowledge is to cram larger amounts of the “sacred content” into lectures. (Paul and Elder 2001; Spence 2001)

This in turn has generated an almost universal response from students who are confronted with an onslaught of so-called “sacred knowledge”. Students have become ever more proficient at memorizing and cramming information for the purpose of coping with assessments and the equally “sacred grade”, but with little or no regard to ability to thinking (critical or otherwise), how to apply such knowledge or its significance. Although such students may achieve higher grades, however, few if any, develop critical thinking or for that matter any of the other skills that are so necessary in their future professional careers or for their life as citizens. (Lemke 2003; Weimer 2002)

Certainly, this traditional approach to teaching and learning carries with it a degree of merit, but to presume that it is the only way or in fact the best way to enhance learning ignores compelling evidence to the contrary that has emerged from most recent research on teaching methodologies. (Wilson 1997) We are now cognizant that faculty-centered instruction in the oral tradition has seriously been challenged by both students and faculty and found wanting. Instead, more and more faculty in a great variety of liberal educational institutions seek to identify ways in which their teaching will contribute to critical thinking and active learning. Thus, faculty are exploring a variety of learner-centered environments and a variety of instructional strategies that will and can support the active engagement of students. In fact, many professional educators have now come to recognize that we must move beyond the “sanctity of the content” and that there is no such thing as essential material and/or information that must be communicated to students. In contrast, such pedagogies argue for the centrality of the skills that students learn as being the key to a high quality modern liberal education. (Wright, 2001)

It is, of course, beyond the scope of this newsletter to identify and discuss appropriate instructional strategies that enable us to move beyond the “sanctity of the content” and instead focus on enhancing learning by “…teaching students to think critically, to find and evaluate information, to communicate effectively, to interact with peers, and other outcomes that will be essential for a successful
career, whether in science, business or social work.” (Wright, 2001) Nevertheless, a generic strategy that may contribute, while allowing faculty to still retain the lecture-based strategy for teaching, is suggested by Stephen Ehrmann and may deserve noting since it relates specifically to a liberal educational environment and reflects the interests of faculty, students, institutions and potential employers. Ehrmann argues that electronic portfolios constitute a key element in modern liberal education as they provide the means by which students can move beyond computer literacy as a goal in itself and instead make use of information technology as a methodology for critical and reflective thinking in relationship to learning goals and objectives. (Ehrmann, 2004)

In this respect, Ehrmann’s suggestion articulates well with the fact that learning is now recognized by most educational experts as a lifelong process, no matter what we do, both in work and at leisure. By recording all the different things we have done, currently do and expect or plan to do in the future we are:

- Reflecting on who we are and what is unique and special about us,
- Identifying areas where we want or need to learn more either by building on existing strengths or addressing current or predictable weaknesses.

Most of the time we respond intuitively to demands on our time using appropriate skills and knowledge: we do not need to consult a record of everything we have done to know whether or not we can achieve a particular task. However, it can be very difficult to know that we will be able to achieve tasks which are poorly defined, appear to require skills or knowledge we do not yet have, are a long way off, or indeed are so immediate we cannot see where to start. An electronic record can be used to match experience, skills and understanding to these sorts of difficult tasks. It can also be employed to develop new goals to help meet changing demands in the context of objectives set in education, work and in leisure.

An electronic record will also enable students to evaluate the effectiveness of any training and development they undergo to meet their goals. If the outcomes do not meet the goals they have set they have a record of what still needs to be done. Thus, when electronic portfolios are used by students it also enables faculty to seek ways of enhancing the curriculum taught and reflect on the instructional strategies adopted. They provide an ideal opportunity, for example, where classroom action research and information technology can articulate in order to enhance the goals and objectives of a modern liberal education and move beyond the limited goal of delivering content. Thus, it is not surprising that an increasing number of institutions (HE) around the world are adopting e-portfolio as an innovation within learning and teaching which they believe might enables us to move to learner-centric methodologies and strategies. In this respect electronic portfolios that can be used alongside most instructional strategies and pedagogic methodologies become indispensable tools for a modern liberal education. (Tosh and Haywood 2005) This is particularly so as they enable us to still deliver content, if we so wish, and at the same time move beyond the “sanctity of the content” in favor of a more learner-centric approach.
Sources:


Learning Technologies: Passport to the Land of Significant Learning
Dr. Pandeli Glavanis, Associate Director, Center for Learning and Teaching

The preceding newsletter suggested that electronic portfolios constitute a key element in modern liberal education since they enable us to move beyond the “sanctity of the content” in favor of a more learner-centric approach. Furthermore, it was argued that electronic portfolios enable students to develop reflective skills with respect to learning goals and objectives. Following on, this newsletter, will argue that a variety of other learning technologies can also contribute to enhanced pedagogy and enable faculty to deliver student-centered lectures: i.e. lectures which deliver “the sacred content”, but also engage students and thus contribute towards active and critical learning. Let me elaborate.

There is a plethora of current pedagogic research which argues that “…effective student learning can occur only when instructors fully engage their students’ skills, interests, and abilities and incorporate that awareness into their teaching practices.” (Gustafson, 2004: 37) Furthermore, the same research indicates that most university students expect to be given the opportunity to make use of sophisticated IT during their course work and that almost 80% of all students surveyed agreed or strongly agreed that the Internet had a positive impact on their learning curve at college. (Jones, 2002) Thus, the critical issue we face as educators is how to resolve the discrepancy between what our students expect and what we are able or willing to deliver. This is especially so with regard to learning technologies and because all of us do agree that enhanced student learning is our primary objective.

Nevertheless, we also have to recognize that as faculty are coming under enormous pressure to make use of increasingly advanced and sophisticated learning technologies, there is also the widely accepted fact that their own skills in this area are limited. Thus, many have resorted to using Virtual Learning Platforms (e.g. WebCT) simply as a repository of learning materials which they justify as a cost saving device. Others resent the additional time and effort that is required to gain familiarity with such learning technologies, produce new and appropriate material and to manage its use in delivering their courses. Furthermore, many faculty wonder how this suddenly became part of their job description without any rewards or recognition and even feel betrayed by the absence of institutional guidelines and support for the use of such technologies. (Bell and Brown, 2005)

Albeit, such concerns and fears are sincere and in many cases well justified, but what such faculty fail to recognize is the way in which learning technologies and digital media also offer a unique opportunity to rethink conventional teaching methodologies whose sell-by date has long expired and thus also the wonder of student engagement. For learning technologies are not to be introduced as an end in themselves, but as a vehicle or passport to enhanced teaching and learning practices which is of course the principal objective of all faculty. In fact as Bell and Brown note “the border posts are open: this [learning technologies] is the passport.” (Bell and Brown, 2005)
In order to underscore the point made by Bell and Brown, let me elaborate by referencing the benefits to be derived from a course that has been re-designed as a result of introducing learning technologies. To do so I will draw upon three sources: first, the experience of the Department of Mechanical Engineering, University of Strathclyde, as presented to us at AUC by its Chair Professor Jim Boyle (2004); second, the pioneering work of Dee Fink (2003) whose work on “significant learning” inspired Strathclyde colleagues and surpassed Benjamin Bloom’s antiquated taxonomy; and third, my own basic and simple taxonomy of educational activity.

It is of course beyond the scope of a short newsletter to elaborate on the above in any detail, but what can be stated is that Strathclyde re-designed its courses by referencing the triumvirate of pedagogy (Dee Fink), re-designed learning spaces (studio teaching) and the introduction of new learning technologies (personal response system). For, as Professor Boyle noted, the pedagogic approach that they adopted reflected Dee Fink’s basic philosophy that “for learning to occur there has to be some kind of change in the learner”. In other words, “No Change, No Learning”. Thus, Strathclyde changed the learning spaces, introduced new learning technologies and mixed various teaching styles (peer instruction, problem-based learning, etc.), so as to improve the student’s learning experience. The result was “a significant learning experience...[where] the students are actively engaged and there certainly is a high energy level...[which] also certainly lead to a significant and lasting change in the students”. (Boyle, 2004: 9)

It took Strathclyde eight years and significant resources to achieve “significant learning”. At AUC we are privileged in that the New Campus (learning spaces) is around the corner and many faculty are already making use of a variety of different teaching styles. Thus, what is still lacking is an enhanced use of new learning technologies in order for us to complete the triumvirate. This, it can be argued, can be achieved during the remaining transition period before we move to the New Campus if we break down the standard components of our teaching and see where we can introduce learning technologies. To clarify this let me conclude by presenting a simple taxonomy of educational activity and indicate (in brackets) what learning technologies can be used.

- **Informing** – Transferring content to the student in some manner (*web sites and/or WebCT*)
- **Structuring** – providing an organization to a subject matter and/or to the activities in which the student will engage while studying (*PowerPoint diagrams on web site and/or WebCT*)
- **Orienting** – giving the student an understanding of where they are in the material, structures, course etc (*electronic portfolios*)
- **Motivating** – providing reasons why a subject is included to encourage participation and recognition of importance (*internet sources, electronic discussion boards*)
- **Assessing/Evaluation** – determining the student understanding in order to provide a ‘mark’ (*RESPONDUS*)
• **Assessing/Diagnosing** – determining the student understanding in order to be able to fix it (*electronic self-assessment quizzes*)

• **Remediation** – Informing etc. as part of a response to issues raised by the process of assessing/diagnosis (*electronic discussion boards, e-mail, instant messaging*)

• **Elaboration** – providing further depth within a topic (*internet sources*)

**Sources:**


AUC Academic Integrity Campaign is Paying Off

Dr. Aziza Ellozy, Director, Center for Learning and Teaching
Dr. Mohamed Nagib Abou Zeid, Dept. of Construction Engineering

On February 8th, 2006 the Task Force on Academic Integrity and the Center for Learning and Teaching had the pleasure of hosting Dr. Don McCabe, an expert on academic integrity issues in higher education and the founding president of the Center for Academic Integrity, “a consortium of over 400 colleges and universities based at Duke University who are joined in a united effort to promote academic integrity among college and university students”.

Dr. Don McCabe, Professor of Organization Management at Rutgers University, has done extensive research on college cheating over the last fifteen years, surveying over 100,000 students at more than 140 colleges and universities in the U.S. and Canada.

AUC’s association with Dr. McCabe started in 2002 when the Provost’s Task Force on Academic Integrity sought his help in conducting a campus wide web survey to assess the state of academic integrity at AUC. The survey was conducted in the spring of 2003 and 656 AUC students as well as 60 AUC faculty members participated.

During his visit, Dr. McCabe gave a two-hour session on “New Developments on the Academic Integrity Front” where he shared the results of his latest research and discussed the 2003 AUC results. This was followed by another two-hour session where representatives from the Provost’s Task Force on Academic Integrity, The Academic Integrity Committee and the Center for Learning and Teaching presented and discussed AUC’s “Policies, Practices and Lessons Learned”.

AUC 2003 Survey

In this newsletter we highlight some of the results presented. In Table I, results of the AUC 2003 web survey of undergraduates are compared to those of their counterparts in the US/Canada.

<table>
<thead>
<tr>
<th></th>
<th>US/Canada Institutes</th>
<th>US/Canada Institutes</th>
<th>AUC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2002-2005</td>
<td>Fall '05</td>
<td>2003</td>
</tr>
<tr>
<td>Internet 'cut and paste'*</td>
<td>37%</td>
<td>36%</td>
<td>51%</td>
</tr>
<tr>
<td>Cheating on written work</td>
<td>47%</td>
<td>45%</td>
<td>62%</td>
</tr>
<tr>
<td>Test cheating</td>
<td>21%</td>
<td>23%</td>
<td>68%</td>
</tr>
<tr>
<td>Internet plagiarism (e.g. paper mills)</td>
<td>3%</td>
<td>6%</td>
<td>16%</td>
</tr>
<tr>
<td>N</td>
<td>54,835</td>
<td>1,404</td>
<td>656</td>
</tr>
</tbody>
</table>

Table I: Some of Dr. Don McCabe’s web survey results
This comparison extends in the figure above where perceptions of AUC students vis-à-vis certain issues are highlighted.

**AUC’s 2005 Survey**

To assess the effect of AUC’s two year academic integrity campaign, an in-house survey was conducted last summer where 322 undergraduate students participated. The results are shown in Figure I and Table II and III.

### Table II

<table>
<thead>
<tr>
<th>Occurrence</th>
<th>% of students who have seen “some change” to “much more change”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plagiarism on written assignments</td>
<td>56%</td>
</tr>
<tr>
<td>Cheating during tests</td>
<td>53%</td>
</tr>
<tr>
<td>Inappropriate sharing in group assignments</td>
<td>47%</td>
</tr>
<tr>
<td>Falsifying of lab data</td>
<td>43%</td>
</tr>
</tbody>
</table>

N = 322
An interesting result of AUC’s effort these last two years is that, although AUC students do not support academic integrity policies as much their counterparts in the US/Canada do, there is a definite change in their perception of the effectiveness of these policies (Figure I). This is mirrored by the more detailed results in Table II where more than half the students surveyed reported seeing a change towards less plagiarism and less cheating. It appears however that, as faculty, we need to be more explicit as to what constitutes legitimate group work and what does not. Results also indicate that we need to be more diligent in addressing falsification of lab data.

Answers to questions that addressed students’ perception of their own individual change with regards to academic integrity are shown in Table III. They are encouraging. A majority of students agree/strongly agree that the academic integrity campaign has reduced their tendency to cheat.

<table>
<thead>
<tr>
<th>Awareness of Academic Integrity has</th>
<th>Agree/Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced my tendency to cheat</td>
<td>55%</td>
</tr>
<tr>
<td>Changed my attitude towards cheating</td>
<td>55%</td>
</tr>
<tr>
<td>Changed my attitude towards fellow students cheating</td>
<td>40%</td>
</tr>
<tr>
<td>Made me more willing to report other students cheating</td>
<td>19% (compared to 3% in 2003)</td>
</tr>
</tbody>
</table>

Table III

Among the most significant remarks made by Dr. McCabe is that AUC is perhaps the only university he knows of that requires its faculty/students/administrators to sign the Code of Ethics (75% of our faculty have so far signed the Code of Ethics). Along those same lines, Dr. Abou Zeid received a request concerning the Code of Ethics. It reads:

“…I was referred to your Code of Academic Ethics and related documents including the Student and Faculty Agreements. We were impressed with the content of the document and interested in adopting your material…”

Academic Advisor for Northeastern State College, College of Business and Technology, Oklahoma, USA.

Dr. McCabe concluded his presentation with a discussion of strategies to consider as we continue our efforts to promote and sustain academic integrity. He specifically emphasized education vs. punishment and the need to give students a primary role, a sense of ownership: “Let them build a ‘new’ tradition”. Finally there was a consensus among all those present that striving for academic integrity is an ongoing process, a journey and not a destination.
Engaging Hur: Reflections of a Service-learning Adventurer

On the occasion of the inauguration of the

John D. Gerhart Center for Philanthropy and Civic Engagement

Amani Elshimi, Writing Instructor, Composition and Rhetoric

On a grim and dusty Saturday morning, as street sweepers swished dry leaves into the sewers (and no roosters cuckooed on rooftops), I hopped into my car and drove to campus. Today, my class would receive intensive training in the methodology of teaching literacy – a session, especially arranged by the Office of Student Development, delivered by the Rotary and attended by sixteen students from my Research Writing class, one TEFL graduate student, myself, and Hur (pronounced Hoor).

The training was part of a capsule service-learning project on the theme of "Civic Engagement." The students would then spend two Saturdays at Nekla village, teaching learners at the AUC Village Library. "We can't very well talk about 'civic engagement' seated within a walled classroom," I had told them. And they had moaned.

As we assembled for the workshop, I heard the usual complaints – Do we have to? Why us? Are the other sections doing this? Is this graded? How long is this going to take? This is a Saturday, you know. I knew something was wrong, the minute I joined this class. I smiled. As I managed my fifth service-learning adventure, I felt I had finally become attuned to the emotional cycle of students introduced to course-embedded service – confusion, uncertainty, resistance, affected boredom, curiosity, engagement, affected disengagement, affirmation of engagement, uncompromising criticism of project, re-appraisal of personal, academic and social goals, and finally, appreciation of experience.

The term "service-learning" conjoins the acts of "service" and "learning," not as distinct, parallel tracks, but as an integrated, holistic experience which immerses students and teachers in an authentic community context where academic knowledge and skills become instrumental in fulfilling the service outcomes. Eyler and Giles (1999) define the term as:

“a form of experiential education where learning occurs through a cycle of action and reflection as students work with others through a process of applying what they are learning to community problems and, at the same time, reflect upon their experience as they seek to achieve real objectives for the community and deeper understanding and skills for themselves.”

I watched the students yawn through the theoretical background of the presentation. Illiteracy rates are as high as 48% (yawn). They may be as high as 70% if we count the dismal levels of literacy up until preparatory school (yawn). Any questions? (yawn).

In came Hur – a student's beautiful two-month old daughter - claiming her midday feed. Hur was joining us on the long Saturdays, promising to be an active and assertive member...
of the class community. And community it became… Would Hur be safe in the village? Could she contract Avian Flu? Would there be appropriate nursing space at the library? Wouldn’t the day be too long for her? The reality of the upcoming village trip suddenly loomed. Are we really going to teach? How old are the learners? Did AUC students build the library? Where is the village? Can we work in groups? The emotional cycle was rolling.

As my students worked in teams to plan, create and present language games for the village children, I saw specific course goals materialize – constructive argument, use of audience-appropriate appeals, development of detail, cultivation of credibility. I should refer later to this concrete experience, I thought, to reinforce academic writing. Hur’s head nodded in agreement.

Over lunch, we shared fears and uncertainties, support and reassurance. We bragged of parents involved in community organizations, and service activities we had taken part in at school, mosque, church or club. We told stories of friends who secured jobs at high-ranking oil companies, only to find they had been posted in rural villages and distant areas. They should teach literacy to the villagers in their free time. If every literate person taught just 2 or 3, illiteracy levels would go down. They had been listening, after all.

My experience with service learning over the past three years has been challenging, but always greatly rewarding. Listed below are some of the challenges and rewards.

**Challenges**

- time-consuming
- needs team, time, project and crisis management skills
- may pose difficulty in assessment
- needs departmental support (to modify pre-existing structures)
- may be given an inadequate percentage of the grade
- needs risk tolerance
- may cause concern for student safety

**Rewards**

- provides an authentic learning context
- raises consciousness on community issues and problems
- allows higher retention of knowledge and skills
- caters to a variety of learning styles
- strengthens teamwork and cooperation
- heightens motivation and enhances self awareness
- improves analytic, evaluative and problem-solving skills
- improves creativity and judgment
- enhances written and oral expression
- redefines role of teacher as facilitator and fellow learner
integrates student academic and social development
employs education for the enhancement of community

The newly-established **John D. Gerhart Center for Philanthropy and Civic Engagement** promises to centralize, facilitate and help sustain campus efforts that promote community-based pedagogies and service activities. It repositions the institution as an active participant in community development, and empowers faculty and students to engage in community problem-solving, research, service and civic involvement. Its mission statement emphasizes "a dual focus"

"to consolidate university activities aimed at encouraging engaged citizenship and service, and to promote enhanced philanthropic giving in the region."

One of the first projects of the Gerhart Center is the "Campus Literacy Project" – the rebirth of a 1997 student initiative, aimed at promoting literacy amongst the AUC workers. By focusing first on the community within, the Center highlights its vision of social justice, and institutionalizes a culture of responsible citizenship amongst all university stakeholders – students, faculty and staff.

As my students gathered their belongings at the end of that grim Saturday morning, I walked up casually to a fellow who had been visibly resistant at the beginning. "How was it?" I asked. "Eshta*," he replied. “Can I analyze the literacy programs at Nekla for my research paper?” And Hur squealed out in glee.

*Eshta is Arabic slang for 'cool!"

**Sources:**

Note: Volunteers for the "Campus Literacy Project" may teach either Arabic or English, at beginner or intermediate levels. Training in the methodology of literacy will be given prior to teaching the classes. If interested, contact

**The Gerhart Center**
Youssef El Guindy,
3rd floor, appt. 33
Ext. 5467
The Write Place for Communication

Natascha Gast, Writing Center Coordinator

For two days in November, the American University in Cairo hosted an international symposium on Communicating Across the Curriculum, which allowed faculty from over 37 universities in 17 countries to share their experiences in integrating communication and critical thinking skills in the disciplines. As Dean Lesch noted in the Opening Address to the conference, "AUC is currently grappling with the issues of how to promote writing, oral communication, critical thinking, and creative thinking in its courses in all disciplines." The AUC Writing Center's tutoring services, workshops, and online resources assist faculty and students in this endeavor.

Creating assignments, guiding students through the writing process, and evaluating the results require a lot of faculty effort and time. Tutors in the Writing Center help by assisting students through the writing process and sustaining writing effectiveness in all AUC courses. According to Walvoord et al., students have trouble in the following six writing and thinking areas when completing an assignment:

1. Gathering sufficient specific information
2. Focusing on the audience and creating a voice
3. Stating a position
4. Using appropriate discipline-based methods to arrive at a position and to support it with evidence
5. Managing complexity
6. Organizing the paper (as cited in Sully, 1995)

The most effective tutoring sessions are those in which the student is still brainstorming, planning, developing, and organizing ideas because it is at this stage that tutors are best able to assist students with these six areas involving writing and critical thinking. It is during these tutoring sessions, as Harris (2000) explains, that students "function in a non-evaluative, supportive environment" in which they have the opportunity to write and think through their ideas while receiving constructive feedback (p. 109). Although tutors may also provide editing and proofreading guidance, the Writing Center is primarily a place for student writers to communicate and develop as critical thinkers while tutors listen, ask questions, and provide instruction for clear and effective communication.

The Writing Center's services include workshops and online resources to support student writing beyond tutoring sessions. These workshops and resources further encourage students to be self-reliant and to participate in all aspects of the process of communicating. The group workshops develop communication skills used in every discipline, such as grammar, in-class writing and essay exams, writing with technology, and oral presentations. Because communication in specific disciplines or for specific assignments may require specialized
For specific details about tutoring, workshops, online resources, and faculty services, visit the Writing Center website at **www.aucegypt.edu/academic/writingcenter/**

The Writing Center exists to help undergraduate and graduate students improve their communication skills, thus supporting every AUC course by preparing students for the challenges of the academic and professional worlds while immersing them in these dialogues. Effective use of the Writing Center's services and resources can enhance communication in all disciplines and encourage students to think more independently and critically.

**Sources:**


Multiple Intelligences: What It Is and Why It's Vital Today
Emma Zevik, Performing & Visual Arts (PVA)

Perspectives on adult learning have changed dramatically over the decades. Defining intelligence has expanded in many different ways, from a traditional, basic view of gaining knowledge and skills to an enhanced view of developing a process of critical self-reflection leading to transformation.

Traditional academic study rewards teaching and learning based on the traditional notion of intelligence - I.Q. testing which scores linguistic and mathematical abilities. The teaching method therefore is based on straightforward lectures, textbooks, written exams, formulas and more.

For Dr. Howard Gardner, Professor of Education at Harvard University, intelligence has been too narrowly defined -- he believes that intelligence is not a single construct--there are multiple intelligences (MI). In 1983, Dr. Gardner developed his pioneering work in expanding the concept of intelligence. His work proposes that the traditional view of intelligence, based on I.Q. testing, is far too limiting. Instead, Dr. Gardner's model identifies eight different intelligences to account for a broader range of human potential in learning. These intelligences are:

- **Linguistic**: The ability to use language effectively both orally and in writing.
- **Logical/Mathematical**: The ability to use numbers effectively and reason well.
- **Visual/Spatial**: The ability to recognize form, space, color, line, and shape and to graphically represent visual and spatial ideas.
- **Bodily/Kinesthetic**: The ability to use the body to express ideas and feelings and to solve problems.
- **Musical**: The ability to recognize rhythm, pitch, and melody.
- **Naturalist**: The ability to recognize and classify plants, minerals, and animals.
- **Interpersonal**: The ability to understand another person's feelings, motivations, and intentions and to respond effectively.
- **Intrapersonal**: The ability to know about and understand oneself and recognize one's similarities to and differences from others.

Most academic institutions focus most of their attention on linguistic and logical-mathematical intelligence, ignoring other important areas of competence. Generally, we esteem the highly articulate or logical people of our culture. However, Dr. Gardner says that we should also place equal attention on individuals who show gifts in the other intelligences: the artists, architects, musicians, naturalists, designers, dancers, therapists, entrepreneurs, and others who enrich the world in which we live.
Unfortunately, students who have these gifts don’t receive much reinforcement for them in the academic arena. Many of these learners, in fact, are often viewed as "underachievers," when in fact their unique ways of thinking and learning aren’t addressed by a heavily linguistic or logical-mathematical classroom.

MI then, as a pedagogical approach, provides eight different possible pathways for learning and teaching. This offers several other ways that material can be presented, and assessed, to facilitate effective and most often outstanding learning outcomes. One example offered by Thomas Armstrong is:

"If you’re teaching or learning about the law of supply and demand in economics, you might read about it (linguistic), study mathematical formulas that express it (logical-mathematical), examine a graphic chart that illustrates the principle (spatial), observe the law in the natural world (naturalist) or in the human world of commerce (interpersonal); examine the law in terms of your own body [e.g. when you supply your body with lots of food, the hunger demand goes down; when there’s very little supply, your stomach’s demand for food goes way up and you get hungry] (bodily-kinesthetic and intrapersonal); and/or write a song (or find an existing song) that demonstrates the law (perhaps Dylan’s "Too Much of Nothing")." (Armstrong)

Armstrong goes on to say that educators can be trained to present their curriculums in a wide variety of ways using music, cooperative learning, art activities, role play, multimedia, field trips, inner reflection, and much more.

In order for that to happen, educators need to rethink their own training and academic experiences as students and their priorities in the classroom as educators. Effective use of MI in the classroom involves tremendous risk for educators focused on content, traditional exams, grades, lectures - all of these activities present a teacher-centered pedagogy. Creating a "student-centered" approach asks for professors to change their view of the roles of both instructor and student.

Engaging Students for Greater Achievement

As previous “New Chalk Talk”s have discussed, a student-centered focus asks instructors to change their teaching methods and strategies: to move away from "the traditional lecture delivered to passive students, to let go of power and control and have their students become more involved in their own learning" (New Chalk Talk, Dec 14 2003, Volume 3,issue 1).

Using an MI approach, instructors become FACILITATORS empowering and encouraging students to pursue their studies in the most effective ways possible rather than lecture-driven experts controlling the dissemination of knowledge; students become intelligent learners able to understand and direct their own learning and development to achieve outstanding academic success.

Allowing for a variety of differences in styles of learning from students rather than requiring all students to conform to and to match with the instructor's method of teaching can bring
about outstanding learning outcomes for the greater number of students. For faculty able and willing to take the risk, combined with flexibility and openness, the resulting outcomes for student achievement can be truly transformational.

Of course, initially some educators may think that this learning philosophy works fine with young children but that older students need to abandon these childish learning activities. Yet, in fact

Gardner's work has demonstrated groundbreaking effects for adult learning and development. Consider the following excerpts from a report on adult ESL curriculums:

"Teachers who use MI theory to inform their curriculum development find that they gain a deeper understanding of students' learning preferences and a greater appreciation of their strengths. Students are likely to become more engaged in learning as they use learning modes that match their intelligence strengths. In addition, students' regular reflection on their learning broadens their definitions of effective and acceptable teaching and learning practices. Students' increased engagement and success in learning stimulates teachers to raise their expectations, initiating a powerful expectation-response cycle that can lead to greater achievement levels for all." (Christison & Kennedy)

**Sources:**

Active Learning (3)
Three Easy Pieces
Dr. Aziza Ellozy, Director, Center for Learning and Teaching

“The new learning paradigm...balances the delivery of content with the discovery of knowledge”. (Saunders, 2000).

One of the most common obstacles in introducing active learning in the classroom is the perception that it takes away from the lecture. The typical 40+ contact hours that a professor has with his/her students during a semester are usually considered to be barely enough to cover the “content” of the course. Yet thanks to excellent classroom research (McKeachie et al., 1990) we know a great deal about how learning happens, and not much of it will be happening in the classroom unless students are actively engaged. Research comparing lecture versus discussion techniques (McKeachie et al., 1990) concludes that:

“When measures of knowledge are used, the lecture proves as efficient as other methods. However in those experiments involving measures of transfer of knowledge to new situations, or measures of problem solving, thinking, or attitude change, or motivation for future learning, the results show differences favoring discussion methods over lecture.”

So, the question becomes: should instructors sacrifice content coverage (i.e. knowledge delivery) in order to allow active/collaborative learning (i.e. knowledge construction)? The answer is: not if they shift some of the responsibility of “content coverage” to the students. Students, working in groups or individually, can be guided to explore the course content through active learning, where they “do most of the work… use their brains…studying ideas, solving problems, and applying what they learn” (Silberman,M.1996). In so doing they engage in the process of building their own knowledge from the information they are acquiring.

The following describes three commonly used interactive/collaborative learning structures that can be used in-class, and can be adapted to many disciplines or situations. In each case the instructor could deliver one or two mini-lectures per class, and separate them by a brief group work session. Students can work in teams of two or four students, and one of them could be randomly assigned to be the group recorder.

- **Think-pair-share (TPS)**
TPS was first introduced by Lyman (1981) and is recommended for instructors who have not used collaborative learning previously. The instructor poses a question or a problem (work through derivation, explain observation, list assumptions, errors or ethical dilemmas in a problem or a case study, etc.) and gives the students a minute to think and write about it. They then pair with a partner(s), compare their answers and, if possible, synthesize a joint response.
After a few minutes the instructor has the pairs share their solution (comments) with other pairs, or with the class. The exercise allows the students the opportunity to reflect upon their learning, to express their ideas, and to find out what they know and what they don’t know. It enhances their oral communication skills, and helps them better understand the concepts at hand.

The peer instruction method which we discussed in New Chalk Talk’s September 14, 2004 issue is a variation of this collaborative learning structure.

- **Short Writes**
  At the end of a lecture the instructor hands out 4x6 cards and asks the students to write on one of the sides a summary of the main points covered during the lecture. (He/she can also ask them to relate these points to the overall goals of the course, topic or chapter). Students then discuss what they have written with a partner for about two minutes, after which they rewrite a revised version on the other side of the card which they hand in as they are leaving the class.

- **Thinking Aloud Pair Problem Solving (TAPPS)**
  TAPPS, a problem-solving collaborative technique has been called “arguably the most powerful classroom instructional technique for promoting understanding” (Felder, R.M. and Brent, R., 2003). Students work in pairs on a problem (work through a derivation, explain an observation, find assumptions, find error in a solution etc.), with one of the students acting as a Listener and the other as a Problem Solver (they switch roles during the next activity). The latter reads the problem aloud and orally goes through the solution (answer) while the former listens to each step. If the Problem Solver’s thought processes become fuzzy, the Listener can ask questions without prompting the solution. He/she can also point out if an error is made without mentioning what the error is. This goes on until a solution is reached to the satisfaction of both.

**Sources**


Active Learning (4)

Is Cooperative/Collaborative Learning a Self-Less Pursuit?82
Dr. Pandeli M. Glavanis, Associate Director, Center for Learning and Teaching

The immediate answer to the question is a very definite and emphatic NO. In fact the rest of this short essay will argue that as all forms of social cooperation are based on some type of self-interest; thus, cooperative/collaborative learning is also anything but altruistic. Nevertheless, I will argue that it is precisely because self-interest is embedded in all forms of cooperative/collaborative learning that it enables this style of learning to lead to an interactive and constructivist approach to learning, i.e. active learning. The logic of the argument once again derives from established social theory and in particular the “theory of social cooperation” as exemplified in such classic accounts as “The Prisoner’s Dilemma Game” in which the players are confronted by only two choices: to cooperate or to defect. (McConnell, 2000: 6) The dilemma, of course, is that if both players defect they will both lose whereas if they were to agree to cooperate on some form of agreed upon reciprocity then both will gain. The application of the above to a learning context, however, immediately raises an insurmountable obstacle which would appear to defy the possibility of ever being able to achieve any form of cooperative/collaborative learning if it is truly based on self-interest and agreed upon reciprocity. It is the essence of a “fair” educational system that all students are treated with equity and thus when given the same piece of work or task they are also evaluated according to the same agreed upon and transparent criteria. Nevertheless, it is practically unheard of that all the students in a class will also receive exactly the same grade. Thus, students, irrespective of whether they wish to cooperate and collaborate will also find themselves in a situation where they are made to compete against each other for the high grades. Educational systems and institutions therefore may be seen as constituting the insurmountable obstacle which may prevent cooperative/collaborative learning from gaining recognition as the most effective method of achieving active learning.

The above may well be the case, but only if reciprocity and what each student expects to gain from cooperative/collaborative learning is uniform and identical to what every other student in the group also expects to gain. Social reality, however, is far more complex than that and has shown us that social agents (individuals) extract from social interaction what is appropriate to them and not necessarily what is appropriate to the group as a whole. In other words, in a cooperative/collaborative learning situation where the group is expected to solve a problem or complete a project, individual members of the group may also gain other benefits that have little or no relationship to the targeted collective objective. Let me elaborate.

Cooperative/collaborative learning as with any form of social cooperation is essentially a social process where the process itself is by far the most significant element. The social process however involves a variety of dimensions which in themselves may not lead to the

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82 The AUC team consisted of Libraries and Learning Technologies (LLT) representatives (Dean Shahira el Sawy, Dr. Aziza Ellozy and Mr. Michael S. Allen), a teaching faculty (Dr. Ali Hadi), an architect from the New Campus Development Office (Mr. Ashraf Salloum), and one of the AUC consultants (Mr. Robert Luchetti).
actual solution of the problem at hand, but are critical in establishing social cohesion, “bonding”, social interaction, enjoyment, self-assurance, etc.

Thus, the benefits to be derived from cooperative/collaborative learning (working in a social peer group) far exceed the specific and targeted academic achievements whose attainment brought the group together in the first place. David McConnell exemplifies this when he notes that:

*Cooperative learning is process-driven, i.e. those involved engage in a social process and have to pay attention to that process in order for them to achieve their desired end point… There may be group ‘products’ towards which the learners are working…and there may be individual ‘products’ which are achieved through people in the group helping each other deal with their own individual learning concerns (McConnell, 2000: 8).*

It is the very fact that collective forms of social interaction or for that matter Cooperative/collaborative learning can generate at the same time both group and individual ‘products’ that makes this method of organizing learning so productive. For it is an approach that enables each and every member of the learning (social) group to derive what s/he needs in addition to the common objective: solving a problem set by the class instructor. It is, of course, these very personal and individual gains that allow for cooperative/collaborative learning to take place in spite of the institutional pressure to compete. For self-interest is satisfied by reference to the plethora of possibilities to be derived from the social and collective process itself and not just from the ultimate grade to be awarded. In this respect educational systems and institutions do not necessarily constitute an obstacle to cooperative/collaborative learning. In fact, it could be argued that it is precisely because educational systems set students in a socially constructed competitive environment that students also seek to compensate by joining what are equally socially constructed cooperative/collaborative arrangements (social learning groups) whether they be formal (initiated by the instructor) or informal (initiated by the students themselves).

The argument presented above, of course, is but an exemplification of the most fundamental debate within the social sciences, i.e. that of agency and structure (individual and social). It is the debate which, irrespective of which perspective is adopted, highlights the fact that as social beings we all apprehend social reality and thus construct our respective individual cognitive structures via different forms of social interaction. Cooperative/collaborative learning (group work) is but a concrete manifestation of the dialectic of agency and structure which is the key to an understanding of social systems and social dynamics. In this respect, and despite it embodying self-interest, it can be seen as being the most productive form of organizing learning in an educational institution as it reflects social reality. Thus, it is possible to conclude that cooperative/collaborative learning that relies upon self-interest is significantly more appropriate to achieving active learning for the vast majority of the students than a focus on individual learning which is unfortunately the norm in most educational systems. In fact, it is the focus on a socially constructed paradigm that gives priority to individual learning that can be said to be the cause of most of what ails educational systems including academic dishonesty and superficial (by rote) learning.

**Sources**

“New Learning Spaces”: an Eye Towards Our New Campus

Dr. Aziza Ellozy, Director, Center for Learning and Teaching

“Spaces need to allow active learning; anything else is malpractice”
(Best Ideas, 2003 PKAL/NITLE Workshop on “Learning Spaces”)

Many universities in the US and elsewhere have designed or are in the process of designing new “learning spaces” to support new types of teaching and learning on their campuses. The shift in the design of these learning spaces is driven by changes in pedagogy and technology. AUC, with the building of our new campus, has had the unique opportunity of starting from scratch, and of taking advantage of the experience of others. It is also faced with the challenge of getting it right for at least the next ten years.

A month ago, a six-person team85 from AUC attended an intensive three-day workshop on “New Learning Spaces” held at Vassar University (NY), where an impressive group of experienced academics and architects led the formal sessions and provided individual consulting services to each of the participating teams. The workshop was organized by PKAL86 and NITLE,87 two organizations that have great experience in redesigning facilities in light of modern pedagogical requirements.

We approached the task with the knowledge that pedagogy, technology and facilities need to be integrated in a thoughtful and flexible way, and except for the two architects on board, most of us came to the workshop with little previous preparation. We learned a lot. We had many extemporaneous meetings and, among other things, we recognized the need for more communication with all stakeholders. With this spirit, I am writing this newsletter as a preliminary attempt to engage interested faculty in the discourse.

For the sake of clarification, “learning spaces” refer to “all spaces that accommodate the learning community”, and to “all facilities that enable people to learn and to teach”. In what follows, we will be focusing mostly on classrooms.

According to Brown and Lippincott (2003), the concept of the classroom is evolving and expanding. It is evolving as more emphasis on active learning and group work requires spaces that accommodate group interaction. It is expanding because technology allows the functionality of these learning spaces to expand, and to enable new learning activities and new methods of teaching and learning.

We learned that:

85 PKAL Project Kaleidoscope
86 NITLE National Institute for Technology and Liberal Education
87 “The versatile classroom is the one designed to do many things without rearranging the furniture. It can also accommodate a range of technologies that can be used simultaneously” (Baird, J.W. 2004).
• In order for a teaching space to be effective it has to be either very versatile\textsuperscript{88} or very flexible\textsuperscript{89}. The most interesting information on classroom design that I came across is illustrated in the following drawing: in order to have students break up in groups of two, four or eight around a common table, an even number of rows is required.

![Plan of a lecture/discussion/demo versatile classroom (Baird, J. W. 2004)](image)

\textit{Note how you can easily transition from lecture mode (left) to group work mode (right).}

• Technologies will change and rooms that serve the future must be ready for those changes.
• Faculty and students are relying more on handheld units such as laptops, tablet PC’s and PDA’s to access and manage their educational content. The emergence of mobile (portable) wireless technologies will allow spaces to be designed around pedagogical rather than technological needs.
• Students are increasingly encouraged or required to work in small groups, creating the need for more small group study areas. These are often places that are not moderated by an instructor and require access to technology.
• \textbf{Before moving to our new campus}, prototype mockup classrooms need to be constructed and "test driven" by students and faculty.
• A “sandbox” environment (room) needs to be created to research emerging technologies.
• Faculty offices should be thought of as small collaborative classrooms.

\textbf{Sources}


\textsuperscript{88} “The flexible classroom is designed to be able to adapt to change by rearranging furniture and equipment within a fixed space. Room must accommodate changes in technology, teaching methods and student profiles.” (Baird, J.W 2004)

\textsuperscript{89} New Chalk Talk, Vol. 2, No. 7.
Learning Spaces
Moving Beyond the Confines of the “Classroom Walls”
Dr. Pandeli M. Glavanis, Associate Director, Center for Learning and Teaching

“Studies show that when classrooms and lecture halls are designed for the delivery of information, only 5% of that knowledge is retained. Conversely, when space is designed for learning, knowledge retention jumps to 85%.”

Lennie Scott Webber reminds us that instructional space is “a place where both faculty members and students go to ‘work’ every day.” As such it constitutes the physical environment within which universities carry out their main activity, learning. Learning, however takes on a variety of forms and involves a plethora of very distinct activities all of which need to be reflected and accommodated within such instructional spaces. In other words, we need to find ways of matching “the physical environment with the intended behavior – whether it be knowledge delivery, application, creation, communication, or decision making”. This is particularly important as it is widely recognized today that physical environment does affect intended behavior and thus the type of instructional space provided plays a critical role in the way in which students learn.

The above achieves even greater significance when it is noted that not only should instructional space accommodate the needs of the learning experience, but that the very concepts of learning and “learning spaces” have also changed significantly during the last decade. Thus, if we referred to “learning spaces” at all in the past we invariably meant physical spaces (classrooms), with a long history and a multiplicity of renovations over the decades and even centuries in some cases, in which conventional learning and teaching (face to face) took place. Instructional technology and new pedagogic approaches, however, have dramatically expanded and transformed both concepts. As Brown and Lippincott argue

…the concept of the classroom is both expanding and evolving…as classrooms receive technology installations and so acquire new functionality. As the functionality expands, new learning activities become possible. But the concept of the classroom is evolving as well. New conceptions of the classroom are being introduced by the emergence of new methods of teaching and learning, made possible by the rapid evolution and adoption of information technology. Wireless networking, for example, makes real-time or synchronous interaction among students and between students and faculty a very real possibility…this is why the term classroom, at least in its traditional sense, can no longer encompass the teaching and learning options today.

In fact, substantial evidence from pedagogic research shows that more learning is taking place outside of the traditional classroom and that students make use of information technology to “learn” in a variety of spaces both on and off campus. Furthermore, as technology evolves even further, and the cost is reduced, virtual spaces for learning start to challenge traditional physical spaces as the sole reflection of current student behavior in education. Thus, it becomes imperative that all educational institutions must change rapidly their thinking about “learning spaces” in two important ways: “first, we must think in terms of a variety of both real and virtual learning spaces…and we must think about all the support needed to make these learning spaces successful.”
This of course implies a variety of new and costly activities for the conventional university which include a variety of activities extending from faculty training and the development of new curricula to establishing effective help-desk support and an expanded IT maintenance structure. It is by far the most important challenge facing universities in the new millennium; how “…to create a seamless, technology-enabled learning environment for faculty and students”.

The key issue in meeting this challenge, of course, is how to formulate a strategy for evolving the conventional university without a major drain on resources (both human and financial). This requires both a vision, of how instructional technology will continue to transform technology-enable learning and teaching, as well as new forms of “flexibility” in physical design to allow for a multipurpose use of all the physical spaces available to a university (including classrooms, libraries, dormitories, coffee shops, etc.). Nevertheless, evidence suggests that most universities tend to approach this challenge by adopting a singular and linear pattern of thinking which tends to lead to them down the path of equipping both lecture halls and classrooms with IT. This, of course, is a most welcome first step but should be seen as being just that. What is needed instead, however, is a more comprehensive and all encompassing campus wide strategy to transform the conventional university into a dynamic, flexible and multidimensional “learning space”. Thus, the challenge requires also a very different approach to planning. Whereas in the past universities could approach such problems from the perspective of planning and maintaining a “physical environment” only, in the millennium they have to integrate into such thinking the need for faculty training, development of new curricula, installation and maintenance of digital and analog equipment, networks, etc. In other words, in addition to lighting, carpeting, seating and decoration the strategy has to involve as part of an integrated whole a new layer of support requiring a wide range of technical and pedagogic skills. As Brown and Lippincott argue

*If you unpack the modern concept of a learning space, you discover a set of layers or components all of which must be on hand if the use of the learning spaces is to succeed…Our constituents [faculty and students] must be able to prepare materials to present in those classrooms and have the capability to use sophisticated software and hardware for their presentations. They require access to equipment and networks in good working order, and ready access to staff if problems arise.*

As our approach to learning changes so must our thinking about physical space and its planning and maintenance. Modern “learning spaces” can no longer be perceived solely in physical terms and thus their evolution also requires more than just physical planning and maintenance. Students will not learn if we try to locate them in modern classrooms packed solid with technology which neither they or their faculty know how to use. Thus, developing an integrated approach to new “learning spaces” requires both a clear recognition of the centrality of environment in determining intended behavior and “new thinking” with respect to physical planning. This challenge, alas, has yet to be met in most colleges and universities.
Toward a Scholarship of Teaching and Learning
Classroom Action Research at AUC
Dr. Aziza Ellozy, Director, Center for Learning and Teaching

“Instructors use data readily available from their classes to answer practical questions about teaching and learning in their classrooms” (G. Mettetal, 2003).

Recognizing the success of recent pedagogical innovations, and in keeping with our mission to support and promote excellence in teaching, the Center for Learning and Teaching has launched a new “Classroom Action Research” (CAR) Program. Through this program, instructors, supported by CLT staff, can use data collected from their classrooms to assess the effect of certain pedagogies/practices on the learning process. This could (but does not have to) include the effect of a particular technology on teaching/learning. Classroom Action Research is not new. Early proponents of CAR Angelo and Cross (1993) see it as very different from traditional educational research by being less formal and less controlled. It is also carried out by the instructor rather than educational experts. The methodology of CAR is simple and can be easily implemented.

Classroom Action Research can be summarized as follows (G. Mettetal, 2003):

1. **Identifying a question or a problem:** this question should preferably be related to student learning (may entail a new teaching strategy, new teaching materials or technology or a new assessment method).

2. **Reviewing the literature** (optional)

3. **Planning a research strategy:** decide what is going to be measured and how it will be measured

4. **Collecting the data:** these data could be quantitative such as test scores, or qualitative such as class survey or discussion. An excellent source would be Classroom Assessment Techniques.

5. **Analyzing the data:** look for patterns or trends that have resulted from your innovation or teaching strategy.

6. **Taking action based on results:** adopting or changing strategy, tool, and practice.

7. **Sharing your findings:** Publish/present your results to JoSoTL (Journal of the Scholarship of Learning and teaching), ERIC, NLII, or at a conference/seminar.

Faculty members joining the Program will receive the full support of CLT’s staff and Student Technology Assistants during the planning, implementation and data analysis phases of the project.

We are happy to report that already six of our faculty members (representing the three schools) have taken up our invitation to engage in CAR and are working closely with CLT. We hope more of you will join. We invite you to contact us to discuss this program further.

**Sources:**

In a recent issue of Liberal Education, Rick Vaz places information technology at the core of modern liberal education when he argues that “computer literacy is an empowering and liberating skill for undergraduates, useful in virtually every discipline and profession” (Vaz, 2004). In this respect Vaz is locating at the core of the liberal education agenda the fact that it is now widely recognized by most teachers (at whatever level of instruction) that “technology” affects the way we learn and teach. Thus, “smart classrooms” (of whatever form) are no longer an added luxury in contemporary liberal educational institutions or a generous contribution from corporate sponsors; they are the foundation on which modern pedagogy is evolving. This view is echoed by Steve Ehrmann in another contribution to Liberal Education in which he argues that a key element in enhancing learning is the ability of students and faculty to think with the technology rather than thinking about it. Ehrmann argues that “Learning involves a transition from novice to expert, and technology can in some cases enable relative novices to ask meaningful questions of their own, facilitating more active and inquiry-based learning and allowing students to navigate their way through new spaces and ideas” (Ehrmann, 2004).

Nevertheless, Vaz also argues that “computers and the Internet in higher education are not always used wisely, do not always enhance learning, and indeed do not always work reliably. At their best, though, they hold the promise of positive and transformative change for learning and teaching, change that can give our students richer experiences, broader perspectives, and wider audiences for their work” (Vaz, 2004). This reflects a view shared by many in liberal education especially as we are exploring a variety of learner-centered environments and a variety of instructional strategies that will and can support the active engagement of students. This, of course, derives from the fact that we are now cognizant that faculty-centered instruction in the oral tradition has seriously been challenged by both students and faculty and found wanting. Instead, more and more faculty in a great variety of liberal educational institutions seek to identify ways in which their teaching will contribute to critical thinking and active learning.

In this context information technology and especially a variety of forms of smart classrooms constitute a key element that facilitates our search for appropriate instructional strategies. Vaz, however, reminds us again that “just as quantitative literacy is distinct from mathematics, computer literacy is distinct from technology studies. Technology best serves liberal education when it is neither teacher nor subject, but a useful tool for student and faculty work. Faculty, often less comfortable with some aspects of technology than are their students, need both support and creative models for its use, and institutions must determine ways of managing technology so that it is reliable and accessible” (Vaz, 2004).

It is in the above context that Classroom Action Research (presented by Dr Aziza Ellozy in the previous issue of New Chalk Talk), gains significant importance as the means by which faculty can identify the appropriate instructional strategy that will blend information technology with modern pedagogy and thus enhance active learning. As Gwynn Mettetal notes “CAR is a way for instructors to discover what works best in their own classroom situation, thus allowing informed decisions about teaching” (Mettetal, 2003). Learning and Teaching Centers such
as CLT can of course assist in this process, but what is critical about CAR is that it “occupies a midpoint on a continuum ranging from teacher reflection at one end to traditional educational research at the other. It is more data-based and systematic than reflection, but less formal and controlled than traditional educational research” (Mettetal, 2003).

It is, of course, beyond the scope of this short essay to identify and discuss appropriate instructional strategies that combine information technology with modern pedagogy. Nevertheless, a generic strategy that does that, is suggested by Stephen Ehrmann and may deserve noting since it relates specifically to a liberal educational environment and reflects the interests of faculty, students, institutions and potential employers. Ehrmann argues that electronic portfolios constitute a key element in modern liberal education as they provide the means by which students can move beyond computer literacy as a goal in itself and instead make use of information technology as a methodology for critical and reflective thinking in relationship to learning goals and objectives (Ehrmann, 2004).

In this respect, Ehrmann’s suggestion articulates well with the fact that learning is now recognized by most educational experts as a lifelong process, no matter what we do, both in work and at leisure. By recording all the different things we have done, currently do and expect or plan to do in the future we are:

- reflecting on who we are and what is unique and special about us,
- identifying areas where we want or need to learn more either by building on existing strengths or addressing current or predictable weaknesses.

Most of the time we respond intuitively to demands on our time using appropriate skills and knowledge: we do not need to consult a record of everything we have done to know whether or not we can achieve a particular task. However, it can be very difficult to know that we will be able to achieve tasks which are poorly defined, appear to require skills or knowledge we do not yet have, are a long way off, or indeed are so immediate we cannot see where to start. An electronic record can be used to match experience, skills and understanding to these sorts of difficult tasks. It can also be employed to develop new goals to help meet changing demands in the context of objectives set in education, work and in leisure.

An electronic record will also enable students to evaluate the effectiveness of any training and development they undergo to meet their goals. If the outcomes do not meet the goals they have set they have a record of what still needs to be done. Thus, when electronic portfolios are used by students it also enables faculty to seek ways of enhancing the curriculum taught and reflect on the instructional strategies adopted (CAR). They provide an ideal opportunity where classroom action research and information technology can articulate in order to enhance the goals and objectives of a modern liberal education and move beyond the limited goal of just achieving computer literacy. In this respect smart classrooms; classroom action research and electronic portfolios become indispensable tools for a modern liberal education.

**Sources**


A Model for Computer Supported Learning in Undergraduate Education

Dr. Lotfi K. Gaafar, Mechanical Engineering Department

Reflecting on an earlier observation by Dr. Herb Thompson (Department of Economics) that most of us had to teach ourselves how to teach,\(^{90}\) I realized early on in my career that the best way to describe my role as a teacher is that of a learning facilitator. Sometimes that entails leading the way, and other times it requires pointing directions and getting out of the way.

My role as a facilitator is implemented through a model that exploits modern technology while retaining the valuable features of face-to-face delivery and class/office interactions. The model is based on a philosophy with a key theme that the learning process is more effective when class discussions are enriched with various sources of knowledge, and when everything discussed in a class session is available for review outside the class. The computer, the Internet, and a strong course website play a key role in supporting this philosophy which I like to call computer aided lecturing and review (CALR). In CALR, the teaching/learning process is viewed as a continuous cycle comprising the steps of preparation, delivery, review, and evaluation. Evaluation provides feedback to preparation, and so the cycle continues. This cycle is depicted in the figure below along with possible computer/Internet support for all of its steps.

![Diagram of the CALR model](image)

A model for computer supported learning.

For the preparation step, the Internet offers an abundance of sources that allow an instructor to enrich the learning experience. As an example, Massachusetts Institute of Technology (MIT) launched an initiative in 2001 to openly share MIT course materials to create a

\(^{90}\) See Vol. 4, No. 7.
worldwide web of knowledge. To date, MIT has published about 500 courses as part of its OCW program (http://ocw.mit.edu).

Many other resources are available on the Internet ranging from java applets that explain various concepts using interactive animations to complete course materials to websites dedicated to a complete knowledge area. Depending on the nature of a course and copyright considerations, instructors may adopt part of the material in the course or allow students to access the material through an external link.

With the aid of a computer, lectures draw on various multimedia resources to enhance the delivery/comprehension process. Advantages of multimedia based lecturing and the use of a computer to coordinate the lecture delivery include:

- Utilizing a variety of educational resources on the computer including video and animation. Because computers allow random access to digital media, they are more effective than VCRs.
- Promoting the understanding of complex relationships through the gradual and dynamic generation of scientific plots. I use this feature a lot in topics that require extensive data manipulation.
- Expediting the solution of examples.
- Deriving lectures from the course website to facilitate the review process afterwards. Depending on the implementation approach, access to the course website may or may not require an online connection. This issue will be discussed in a later issue of the newsletter.
- With modern capabilities (e.g., the smart classroom in Falaki 212B), the entire lecture may be recorded and saved as a computer file for later reviews. Such a file may include all materials presented during a lecture along with any handwritten or oral comments that went along with them.

As more classrooms at AUC get equipped with an Internet connection, we may add the following advantages:

- Accessing a wealth of knowledge sources to enrich the lecture.
- Allowing the instructor to guide the students’ exploration of external resources; setting them on the right track for self/lifelong-learning.

The ‘review’ aspect of CALR is where e-Learning is heavily utilized. All lecture materials are posted on a course website with extra resources that depend on the nature of each course. Advantages of the course website as articulated by students include:

- Improving access and flexibility: Students can access course materials from school or at home and cover the materials at their own pace in any sequence they prefer.
- By not having to extensively record information during the lecture, students are able to focus on understanding and active participation.
• Saving class time associated with distribution of handout materials.
• Ability to test their comprehension of the subject through the use of partially solved examples, with extra help provided when needed. (For an example, see http://www.aucegypt.edu/gaafar/UNESCO/index.htm)
• Support of self-learning through the availability of external links to more detailed materials including videos and animations.
• A comprehensive website that is ready at the beginning of a semester allows students to gain a clear view of the entire course right from the start.

The presented model addresses all “seven principles for good practice in undergraduate education” including: student-faculty contact, cooperation among students, active learning, feedback, time on task, high expectations, and respect for diverse talents and ways of learning (Chickering and Gamson 1987).

It is clear that the course website plays a central role in the teaching/learning model discussed above. In the following issue of the newsletter, we will look at the design of such a website.

Sources
In the previous issue of the newsletter, I presented a model for computer supported learning in undergraduate education that is based on a philosophy that the learning process is more effective when class discussions are enriched with various sources of knowledge, and when everything discussed in a class session is available for review outside the classroom. The computer, the Internet, and a strong course website play a key role in supporting this philosophy that was labeled computer aided lecturing and review (CALR). This issue focuses on the contents of the course homepage that support the CALR philosophy. Some homepage items are common to all courses while others are added based on the nature of the course. The standard items on every course homepage include:

1. **Syllabus**, containing the course outline, tentative topical schedule, textbook, reference books, important dates, and grading policy.
2. **Course/Class rules**, with a highlight of important policies relating to attendance, academic integrity, and the scale for final grades.
3. **Course notes**, including presentations delivered by the instructor during class meetings and external reading materials.
4. **Assignments**, including due dates, extra resources, and in some cases Turnitin instructions.
5. **Message board**, where important messages are posted.
6. **Old exams and quizzes** with solutions available in most cases.
7. **Useful links**. This item links to external materials that support and broaden the coverage of courses. In a course on manufacturing processes, it links to a site titled "How Everyday Things Are Made" (created by Design4X, Inc, http://manufacturing.stanford.edu). In a course on engineering economy, it links to a website at Georgia Institute of Technology that contains a course on engineering economy with a complete set of video lectures (http://www.isye.gatech.edu/engecon/lectures/lectIndex.html).
8. **Grades**, with frequent updates for quick feedback and inline with a policy that allows students only one week to discuss any graded material.
9. In addition to the items above, and considering the nature of a course and availability of resources, extra features may include one or more of the following items:
10. **Solved exercises and practice problems**. In some cases, when attempting to solve a practice problem, students have the option of viewing a similar example or viewing the detailed solution. This provides gradual help to those who have difficulties. When used in the right way, this help can significantly improve comprehension of the subject.
11. **Case studies**. This item complements class discussions of case studies and provides detailed solutions to problems and issues raised during these discussions.
12. **Lecture notes (as taken, and electronically prepared, by students)**. This item allows students to see the class from the perspective of another student, and to gain access to events of a class they missed. Instructors may choose to edit these files for
13. accuracy and consistency. In many cases, I choose to post these files as provided by the students with no modifications preceded by the following disclaimer: “The following links connect to lecture note files as submitted by the listed students. These files are posted 'as is.' They are not reviewed or edited. I assume no responsibility for the accuracy of their contents. Use them at your own discretion (or risk!).” Students find this option very useful, especially in summer courses, and consider it an important communication tool.

14. Laboratory plans. This item is useful for courses with labs. The complete laboratory plan prepares students for their upcoming lab experimentations. The plan is updated as actual labs are conducted and extra links may be added to allow students to address particular lab requirements.

15. Project information. This item is used to guide the students through group projects where requirements are added gradually as topics are covered in the course.

The figure below shows a sample course homepage displaying some of the items mentioned above.

Student input has played a key role in evolving the items mentioned above over the past eight years. I usually survey students towards the middle of each semester and use their input on the course website for continuous improvement.

To support the CALR concept discussed in the previous issue of the newsletter, the course website is always available during classes either through an Internet connection or through a local copy on the classroom computer (usually through flash memory). In the following issue of the newsletter, we will discuss platforms for course website implementation.
The Course Website: WebCT or Platform Free?

Dr. Lotfi K. Gaafar, Mechanical Engineering Department

The previous two issues of the newsletter presented a model for computer supported learning in which the course website plays a key role in guiding the learning process inside and outside the classroom. Key items of the website were also discussed. This issue focuses on the implementation of a course website.

While innumerable tools are available for developing a website, our discussion will focus on two options that represent the most logical choices for faculty members at AUC. The first option is to use WebCT and the second option is to use generic tools (e.g., Microsoft Word, Excel, and PowerPoint) and the free Microsoft program, FrontPage. This is not an either/or decision as a better choice may be to use a combination of the two options. Academic computing services (ACS) can play a key role in supporting both options. ACS has an extensive training program that can get anyone up to speed in any of the listed tools. The Center for Learning and Teaching (CLT), with its Student Technology Assistant (STA) program, may also play a vital role in helping faculty members develop and maintain course websites using either option.

For the WebCT option, one uses the WebCT interface, which requires a special account, to design the various aspects of the course website. WebCT organizes its design tools in various categories related to their applications. For the second option, one creates the various learning materials using the generic Microsoft tools (Word, Excel, and/or PowerPoint) and chooses to save the document as a ‘web page’ from the file menu. Such a document is ready for use on the Web. FrontPage is used to link the various documents in an organized website.

Generally speaking, and in my opinion, the second option is easier for straightforward course contents including (syllabus, course notes, assignments, message board, old exams and quizzes, useful links, case studies, solved exercises and practice problems, lecture notes, laboratory plans, and project information). On the other hand, WebCT has an edge in communication and evaluation items including discussions, mail, quizzes, and surveys. WebCT also provides good course management tools.

Accordingly, and in my opinion, the best decision is to develop a course website that uses both options described above. My choice is to use generic tools as much as possible and use WebCT only to fill in any gaps. Currently, I am using WebCT for discussions, surveys and grades. Everything else is done using generic tools. The following WebCT restrictions limit its utility as a stand-alone option:

- As implemented at AUC, access to a particular WebCT course is restricted to students registered in the course. This goes against my belief that knowledge should be accessible to anyone who wants it, including AUC students and any other person around the globe.
Contrasting this restriction with MIT’s OCW program\textsuperscript{91} that received global recognition, leaves one wondering about its logic. In my opinion, password-protected knowledge has no room in an academic environment.

- Related to the problem above is the fact that courses are only active during the semester in which they are offered. If a student needs information from a course that is not offered (e.g., for their senior project), it will not be there. Generic tools allow the instructor full control on activating and removing courses. This semester, I drove a strong message to all students by replacing all courses with a unified page on respecting TA’s and lab assistants. It took less than a minute to accomplish this task. It would have been quite difficult to carry out the same task had the courses been on WebCT.

- WebCT does not support the CALR philosophy (presented in the two previous issues) except in classes with Internet connections. In contrast, a website developed using generic tools is always available where a computer is available. I carry my website (containing all courses) on flash memory, freeing me of any server or activation policy restrictions.

- Courses developed on WebCT require a WebCT server to run. If one moves to another place that does not subscribe to WebCT, efforts invested in structuring the website are lost. My website evolved over the past few years to a size of about 400 MB covering 13 different courses. It would be a serious problem if all structuring efforts were lost because of platform dependency.

The above listed restrictions drove me away from WebCT for a long time. However, I was lured back by the powerful ‘grades’ feature of WebCT. The nice thing about grades on WebCT is that they are password protected (it makes sense here). In addition, students can only see their own grades along with optional statistics on the overall class performance for their reference. This feature helps combat the few grade bargainers that we have at AUC.

Nevertheless, this nice feature comes at the expense of a very cumbersome interface for grade management. Very simple tasks that can easily be done in any spreadsheet can be quite involved, and sometimes impossible, in WebCT, so much that WebCT provides an option to download and upload grades as a text file for manipulation by a spreadsheet package. Such an option is not user friendly either. This may prove to be a serious problem if an instructor, out of frustration, delegates the task of grades management to a TA. Such a delegation would grant the TA unlimited access to grades. While I trust that most TAs at AUC are professional and ethical people, some are too young and are dealing with students who were, in some cases, their classmates a semester earlier. This may be too much pressure for a young TA to handle, leading to serious academic integrity problems.

Similarly, instructors should give serious considerations before adding a TA to a WebCT course. Again, while this may relieve some of the load of designing and maintaining the website, the TA will have unlimited access to the grades. I have brought this problem to the

attention of the concerned ACS staff who promised to look for solutions, but so far, I have not received any answers. I suggested that WebCT should allow an instructor to limit the TA’s access to grades, or lock some grades to where they may not be changed except through a password. To the best of my knowledge, these options are still under investigation.

Using generic tools for posting grades requires caution too. Saving an Excel worksheet as a webpage after hiding several columns would result in a file that seems to show the desired columns only. However, in an Explorer browser, the user will have the option to convert the file back to Excel and recover all hidden information. On older browsers, users may be able to copy the file and paste it in Word revealing all hidden columns. One option here is to capture the screen with the desired grades format and then post the grades as a ‘jpg’ image.

In summary, I recommend that one uses generic tools as much as possible for constructing a course website, especially for items related to the course contents. WebCT may be used for the temporary course items including discussions, surveys, and grades (managed by a patient instructor!). The utility of WebCT may be increased by:

1. Removing the access restriction, or at least making it optional.
2. Improving the grades management interface and allowing better grades control.
3. Providing local servers that would allow instructors to run their courses on any computer without requiring an Internet connection.
Sustainable Excellence in Communicating Across the Curriculum
Cynthia May Sheikholeslami, ELI

Martin Luther King famously said "I have a dream"...and we as faculty at AUC have our dreams too. One of these dreams is of being professors who have lively interaction with intelligent students. This dream depends on effective interactive communication in all the disciplines, across the entire liberal arts curriculum of the university. The reality empowers students as well as faculty in a sustained communal synergy. How are students in fields such as Computer Science and Engineering and Business Administration – which attract the largest number of students – going to be prepared to engage in the lively intellectual discourse we faculty dream of? How can not only students' writing, but also verbal skills be developed to the point where they can begin to communicate as peers with their professors? How can we ensure excellence in communication is sustained throughout the years at AUC and beyond? How can we foster "communication synergy"?

One of the solutions adopted at over 4,000 American colleges and universities (Richmond et al. 2001) arose out of a movement initially known as "Writing Across the Curriculum" (WAC), and now expanded as Communicating Across the Curriculum (CAC) (see "Communicating Across the Curriculum" 2002). The philosophy at the heart of this movement is that students learn best by interactively writing and talking about what they read and hear, and that the faculty's responsibility to ensure that graduates of their university can think critically and communicate effectively is best fulfilled by a campus-wide communication program in all the disciplines throughout the students' educational careers (Richmond et al. 2001). Implementing such programs not only improves the discourse of the students, but also increases faculty morale and faculty collegiality, as well as intellectual interchange among all departments (see research reported in Glick 1988). Thus, the entire campus becomes a livelier, more stimulating environment for everyone.

A campus-wide communication-intensive program requires more effort from everyone – students and faculty – and administrative support and appreciation expressed in concrete terms (Glick, 1988). It also requires renewed commitment to teaching students how to think independently and critically, rather than just telling them what to think (Glick, 1988). It is a step away from traditional security for both professors and students, but it is also a step away from a moribund academic atmosphere often characterized by lack of academic integrity.

The well-known neurologist, Oliver Sacks, argued in his book, Seeing Voices, that human "abilities with language and the ability to convey that language in cogent forms to other members of our species are central to our critical abilities and essential to our ability to really think about concepts" (Richmond et al. 2001). Thus, it is central to the academic mission to educate ourselves and our students to communicate effectively with each other, both in writing and orally (Richmond et al. 2001). Sustaining excellent communication across the curriculum must also be central to lifelong learning...it doesn't stop developing when a student – who might one day even become a university professor – is handed his or her diploma upon graduation.
A faculty member in the sciences at Iowa State University once remarked that his students didn't write – they worked in groups to use computer analysis programs to analyze their data and then they framed the data to solve the problems presented in case studies, and they wrote essay questions in their examinations. To him, that wasn't writing, but 'writing up' – yet it still should have been perceived as interactive communication that was integrated with what they did and thought (Russell in Richmond et al. 2001). And it was not only written, but also spoken, visual, and electronic (see "Communicating Across the Curriculum" 2002).

As AUC moves into the era of modern educational technology with 'smart classrooms', WebCT, and Power Point teaching, it is more imperative than ever that we as an academic community – faculty and students – gather together to see how we can integrate enhancing communication into every department and curriculum. As the world becomes more of a 'global village,' a sense of the importance of how one frames a message – what to include, what to leave out, which words and images to use – is essential in developing the social responsibility expected of global citizens.

To this end, we invite you (and your students) to join us in contributing your ideas and experiences at the symposium below. Through this gathering, AUC aims to create an interdisciplinary dialogue – and even an inter-institutional exchange – to foster a learning community that values written and oral communication as tools for cognitive development and inquiry-based learning, a community that empowers students to explore, assess, and create a community where passion for knowledge is inspired, rhetorical skill promoted, and civic responsibility instilled. Learning excellence – in all disciplines, and among all members of the academic community – can and must be cultivated and sustained.

"On the Road to Sustainable Excellence: Communicating Across the Curriculum"
International Symposium • November 11-12, 2005 • American University in Cairo organized by The Writing Program • The English Language Institute • The Core Curriculum •The Center for Learning and Teaching

Keynote speaker – one of the leading experts in the field – Dr. Chris Anson
(www.home.earthlink.net/~theansons/Portcover.html)

Proposals may be submitted before June 30, 2005, at
www.aucegypt.edu/academic/wpconference/
For further information, contact the organizers at cacprop@aucegypt.edu

Sources:


More of the “guide on the side” and less of the “sage on the stage”?

Dr. Aziza Ellozy, Director, Center for Learning and Teaching

This overused cliché may well apply to some of the comments that were made during the Faculty Forum last Monday, December 8, 2003.

The discussion started by acknowledging that AUC’s uniqueness derives from its liberal arts approach to education. Dr. Nabil Moussa, Mathematics Professor and Chair of the Faculty Affairs Committee of the Senate, recommended that we make sure that our core curriculum delivers the quality we seek.

In 2001, the late President Gerhart commissioned Crane Metamarketing Ltd. of Atlanta to recommend how AUC’s distinctive role could be promoted. They, too, emphasized that our strength lies in our liberal arts education which, in their words, “seeks to turn out graduates markedly different from those who have followed a narrower educational path…” How…?

“I would suggest that the “content” of a liberal arts education is more easily defined than the “method”. At AUC, when we think about “method”, there is a consensus among our faculty that greater emphasis should be placed on developing critical thinking. For this, some teaching methods work better than others.

In recent years, research has shed light on how students learn, and methods involving active or student-centered learning are found, by leading educators, to be more successful at promoting critical thinking than the traditional lecture delivered to passive students. The suggestion by ELI professor, Cynthia Sheikholeslami that professors let go of power and have their students become more involved in their own learning, is at the heart of student-centered learning.

In the next few issues of New Chalk Talk, we will be presenting various active learning strategies that can enhance the traditional lecture. We would like to encourage all faculty members to share with us their own experiences by contributing to the New Chalk Talk series.

Sources:

92 Some professors find this aspect of cooperative/collaborative learning problematic and feel concerned about their role in the learning process. This will be discussed in a forthcoming issue of Chalk Talk.
“Help! I Have No Focus”: Student-Centered Discussions on WebCT (Part I)

Ms. Angela McCallum, Writing Teacher, Dept. of English and Comparative Literature

Although research has shown that student-centered environments foster learning, those of us who teach know that creating such an environment has many obstacles. Here at AUC, the challenge is multiplied as our students have rarely been the part of such learning and aren’t familiar or comfortable with their new role. In fact, students often do not take learner-centered activities—such as discussions or small group work—seriously. They expect to be told what’s important by the teacher. I’ve found that the discussion board feature on WebCT is one way to make my courses more student-centered and place some of the responsibility of learning on the students themselves.

In the traditional classroom, discussions are led by the all-knowing teacher. Students may respond to the teacher, but not often to one another. Typically students are engaged in listening, or daydreaming. I’ve tried to create a less formal, more open-ended, environment for discussions with my composition students and had some success in doing so. But there are always the classes where such efforts provoke blank stares and even fear.

Last semester, I experienced both of these scenarios. I had one class of dedicated and active students. In class discussions there simply wasn’t enough time for each of them to give their input; just as the discussion reached a climax, it was time to go. In another section of the same course, class discussions were nearly non-existent. My question regarding what my students thought of one author’s agreeing with Berlusconi that Western societies are superior to Islamic societies caused my students to stare at the ground in hopes that they might become invisible. One student actually slid his chair over a little to hide behind another. Those who dared to look at me seemed to be looking right through me to some spot on the wall. Others flipped through the pages of the article searching for an answer. Small group discussions were equally dismal as students sat their waiting for me to come over and “tell [them] what to discuss.”

Midway through the semester I began using the discussion boards more frequently and more effectively. My class of overachievers still excelled in this new forum, and my class of “we’re-too-cool-to-answer-your-questions” students found their voice. These discussion board posts brought to light two great advantages for their use: Everyone in the class participated (both in responding and in composing messages), and discussions were driven by the students and not the “sage on the stage.”

In my attentive class, everyone got to participate, while in my detached class, everyone had to participate. We used the discussion boards to share sources on the topic we were researching, to discuss thesis statements, to discuss readings, to help each other find a topic, and to comment on each other’s drafts. By far the most active thread involved sharing sources. Through trial and error, I developed a few guidelines for designing effective discussion board assignments.
Participation should be required. I don’t require participation on every thread as the discussion board begins to have a life of its own and some students are more active than others. But if you can get students to the board in the first place, they often come back on their own.

Assign students to act as moderators or motivators. This takes some of the pressure off of you and places the students in charge. When the discussion starts to die down, these students try to get it going again. They also respond to students postings that they find interesting or offer a counter argument to a classmate’s claims.

Have at least two moderators for any given week and rotate. Some students will be quite good at moderating. They will find interesting questions to post to get the discussion going. Others are not as comfortable or insightful.

Explain what students are expected to do and provide them with a model to follow. Discuss the purpose of the activity and the types of postings that are acceptable. You want students to feel safe sharing their opinions.

Design assignments that actually offer students a reason to go to the discussion board more often. If they get something out of it, they will use it.

Refer to the discussion boards in class. Bring in particular threads you find useful so that students know you are reading.

Try not to dominate the discussion. I like to jump in every now and again and add my own thoughts, but if I am too present, the purpose is defeated.

(To be continued)
"Help! I Have No Focus": Student-Centered Discussions on WebCT (Part II)

Ms Angela McCallum, Writing Teacher, Dept. of English and Comparative Literature

One example of an assignment that worked was having students read a particular article and then post two questions that they had regarding the article. The process went like this. The first student to post simply put up two questions. The next student had to respond to the first student’s posting and add questions: at least one question that came from the article, and had nothing to do with the first posting, and one that came from the posting to which they were replying. Their questions had to be on the board before the next class. This ensured that everyone read the article (one of the main reasons traditional class discussions were not working was that many of the students hadn’t read and thought they could get by with just listening to the in-class discussion).

Because I hoped that this would get the students to read, there were two criteria for their postings: the questions had to show me that they had actually read the article, and they could not post a question if it had already been posted. Before class, I printed a copy of their postings and used some of the better questions to lead the discussion. The in-class discussion was therefore driven by the students’ questions. I chose which questions to use, but they were student generated.

In addition to handing the reins over to the students, discussion boards also create a larger audience. Had I given the same assignment and asked that students turn it in on paper at the beginning of class, I would have been the only audience. Many students would turn in questions that lacked substance or were not well thought out. When their peers make up the audience, they put forth more effort.

While I anticipated success with the above assignment, I was not prepared for what came next. The discussion board finally came to life. My students began to post messages asking their classmates for help. Here is one interaction that took place while students were researching the issue of Islamic dress in Western/secular societies:

“Help. I’m lost. I have no focus,” wrote Mohamed.
Fouad replied with, “I have a focus but no sources.”
“Help me and I’ll send you some sources.”
“Give me the sources.”
“Not until you help me focus.”

In the end, Fouad helped Mohamed focus on the fact that fear was what motivated secular countries to consider banning the veil and Mohamed sent Fouad the three sources he had that related to Fouad’s thesis—secular societies were right to want to ban the veil, but wrong to do so. They could have easily done this with e-mail you might say, but the fact that it took place on the discussion board, allowed the other students to read the postings and benefit from either the sources or the questions Fouad asked Mohamed to help him focus.
I didn’t see the interaction going on until it was over because it all took place after midnight the night before their first draft was due. In class the next day, I heard a student say that she was “so happy to find out [she] wasn’t the only one without a focus.” I imagine others were happy to know they weren’t the only ones without sources.

Student-centered classrooms may not always fit into our 50-minute lessons, but effective use of discussion boards is one way to get a head start so that we may turn the responsibility over to the students yet still cover the content we need to.
Spring 2004 Faculty Workshop Series

• Student-Centered Learning...? Try MERLOT.
Preparation in instructional materials... is one of the time-consuming, difficult and expensive task. This interactive workshop... MERLOT (Multimedia Educational Resource for Learning and Online Teaching), a free, peer reviewed collection of excellent learning modules that you can use in your classes.

The workshop will also introduce you to the constructivist theory of learning, the foundation of student-centered pedagogical approaches. Examples from the MERLOT collection will be used to illustrate this method.

Facilitator: Dr. Aziza Ellozy (Center for Learning and Teaching)

• To Lurk, or not to Lurk; that is the Question: Electronic Mediation of Communication

To “lurk” is to lie hid; to lie in wait; to keep out of sight. “Lurking” in this workshop is used to describe those students... forum but never “participate”.

Although electronic fora... the lack of sustained high-quality participation in fora discussion has been examined and seen to be a regular phenomenon.

This however, is not at all unique... same phenomenon exists, for many of the same reasons, in face-to-face tutorials, group meetings, or political participation and other types of social interaction. If it is “rational” to lurk, and “should come as no surprise” to us, do we need to do anything about it? In this workshop we will examine this and related questions.

Facilitator: Dr. Herb Thompson (Economics)

• Smart Classes for Smart Classrooms

Finding effective pedagogical uses for technology in the classroom can be a daunting task. Smart classrooms are defined as those that only have a data display for the instructor as well as those that include computers for each student. This workshop will examine strategies appropriate for both types of classrooms so that learning becomes an active rather than passive experience.

The workshop will present examples of lecture presentations, student-centered lab work, and methods for linking in-class projects to outside assignments.

Facilitators: Ms. Natasha Gast and Ms. Angela McCallum

• Teaching with the Case Method (Part I)

This workshop will address the methods of case writing in such fields such as management, sociology, mass communication, economics, etc. The principles of case writing will be briefly outlined, and the sequence normally followed will be discussed. A case example will also illustrate the contents and structure of a good case.

Writing a good case is not enough for the effective use of cases as a medium of learning. Some of the workshop time will, therefore, be devoted to how a case may be put to effective use.

The presentation will be brief to allow time for discussion.

Facilitator: Dr. Talaat Abdel Malek (Economics)
• **Teaching with the Case Method (Part II)**
  This workshop will deal with the preparation and use of "dynamic exercises" in case teaching. This type of exercise offers instructors the flexibility to intervene by introducing more variables and observing the students' reactions to each.
  An example will be given to illustrate the contents and structure of a dynamic exercise and how "selective interventions" are introduced.
  **Facilitator:** Dr. Talaat Abdel Malek (Economics)

• **Creating Effective PowerPoint Presentations**
  Using presentations as part of lectures can go beyond bulleted lists of linear information. This workshop will explore the basics of creating an effective PowerPoint presentation that will appeal to multiple learning styles. Using examples of presentations prepared by instructors and students, the workshop will explore instructive and collaborative design principles. Participants will practice designing basic interactive presentations.
  **Facilitators:** Ms Natasha Gast and Ms. Angela McCallum

• **Finding appropriate Multimedia Resources to Complement Pedagogy**
  Finding and selecting appropriate multimedia resources to be used in class and online can be difficult. This workshop will provide a basis for complementing pedagogy with available online and campus resources. Participants will be provided with lists of some resources, will review examples of assignments using multimedia, and will practice combining multimedia elements with coursework.
  **Facilitators:** Ms Natasha Gast and Ms. Angela McCallum
Smart Classes in Smart Classrooms (1)
Effective Use of Data Displays
Ms. Natascha Gast, Writing Teacher, Dept. of English and Comparative Literature

We aren't entertainers and shouldn't be expected to use laser light shows to maintain the interest of our students. However, research shows that students consistently report that a data display is able to maintain their interest more than a spoken lecture. Data displays allow instructors to display images from the instructor's computer monitor for the entire class. Class lessons using data displays appeal to multiple learning styles through the use of multimedia, but the effective use of data displays does not necessarily require video or audio elements.

As a composition teacher drilling the importance of outlining and planning, I often use the data display in my courses for organizational purposes alone. Each class period is outlined as a way to keep discussions focused on specific learning outcomes. Notes and activities are referenced and linked in this displayed online outline, providing a connection between the theory presented in lectures and the practice of group work and individual activities. Using WebCT to archive these notes, activities, and daily outlines allows students to follow the class lessons at home.

The use of data displays should go beyond the presentation of lecture material. The most common use of data displays is the ubiquitous PowerPoint presentation, which often replaces the archived handouts we use to accompany lectures. These presentations can be more than paperless handouts, and the development of interactive lecture presentations and self-study tutorials using PowerPoint is the subject of a future workshop and New Chalk Talk article.

More important than displaying lecture notes, the data display allows for student-centered learning. Multiple texts and graphics can be displayed at once for contrastive purposes, including the comparison of online sources, artwork, and even student work. Frequently class discussions and projects focus on a very specific line of text, graphic, photograph, or other item. Rather than simply reading the material or forcing students to squeeze closer for a view, material can be easily displayed and manipulated.

Of course, outlining lectures and contrasting materials could just as easily be done with an overhead projector, but a data display does not require significant advance planning. A student's work can be displayed for class review on the day the work is due. New material found online can be presented for a class that same day. In fact, only through data displays can the wealth of material found online be made available in class. Web pages can be compared and live online content made available for class debate and discussion. A blackboard or whiteboard is also not ideal for lectures or discussions. The material on a blackboard is there and gone quickly as more space is needed. The spoken word is even more transient. Online space is unlimited, and the student is more likely to take accurate notes when these notes are archived by the instructor.
However, the problem arises that everything is a little too easy for the students when they are provided with so many "smart" tools. The physical act of taking notes reinforces learning. If lecture notes and class activities are provided for students each day, then why should they take notes at all? I've encountered this problem in my classes, but have found that asking students to summarize material in their own words or asking specific questions on the discussion board is one way of overcoming this fault. In other words, taking notes becomes an assignment rather than an automatic response that some but not all students may have during a lecture.

Using data displays in classrooms that also have a computer for each student presents its own unique benefits and problems, and so this form of smart classroom is the subject of the next article in this series.
Smart Classes in Smart Classrooms (2)
Effective Use of Classrooms with Student Computers
Ms. Natascha Gast, Writing Teacher, Dept. of English and Comparative Literature

In a truly "smart" classroom, the instructor has a data display and every student has a computer with Internet access. The computer and Internet have become as essential to learning as the pen, paper, and textbook were in previous years. As a result, using computers in the classroom serves two purposes: increasing technological literacy and enhancing instruction.

Teaching in this type of smart classroom does not require technological skills we do not already expect our students to have. For instance, we do not accept handwritten assignments in most cases, but typing is not done today with a typewriter or word-processor; we use computers. The completion of these assignments most often requires Internet usage for research or other purposes. This computer and Internet work requires basic technological skills, which are not directly taught in any AUC course but are assumed as basic literacy by instructors.

Current research suggests that "future generations will value the ability to use information literacy as highly as we value the abilities to read and write today" (Walker, 2003, p. 18). Use of smart classrooms with a computer for every student creates an environment in which this information technology is taught through infusion with course material. As a teacher in the Writing Program, information technology has become part of my course objectives as it is intrinsically a part of critical thinking and the processing of information today.

Computers in the classroom certainly place the instructor in the position of the "guide on the side" and not the "sage on the stage", but it is a position that constructivists prefer. For those favoring these learner-centered techniques, smart classrooms have some advantages over traditional classrooms:

- The instructor is not the sole source of information within the classroom. Outside "experts" can be brought into the classroom through the Internet. When teaching argument and counter argument, many writing teachers and I use in-class debates. To emphasize the importance of research to support and stimulate arguments, students use Internet material to sustain their positions. Doing this research in class allows instructors to teach effective and scholarly research methods and involves the students in the academic community beyond the walls of the classroom.
- Interactive quizzes can be part of individual instruction or used as collective learning activities. There is no need to "reinvent the wheel" when several excellent quizzes in many disciplines have already been compiled by instructors and are available online. There are also several easy-to-use websites that allow instructors to create simple interactive quizzes. Providing these quizzes in an interactive format, often involving multimedia elements, appeals to non-textual learners.
• Continuity between activities performed in class and at home is reinforced. Homework can be manipulated during class and shared with everyone on the same day the assignment is due. A consistently successful in-class activity in the Writing Program involves analysis and revision of student writing. The smart classroom has the advantage over the traditional classroom in these exercises because many students are simultaneously able to revise and share an assignment created by one student, and then these in-class activities can immediately be viewed and analyzed by the entire class while the objectives for the day are still fresh in the students' minds. Later, student work can be posted to the course website, making the results available for everyone outside of class.

However, a student with a computer is a dangerous animal. Daydreamers and doodlers now have the chance to do something "useful" during class, like check their e-mail. Of course, there is no way to prevent this use of the computers just as there is no way to prevent the same non-involvement in traditional classrooms. Focusing activities, grading participation, and immediately reviewing results limit the amount of time a student can waste in class.

The fact that smart classrooms have programs to exhibit a specific student's computer screen on the instructor's data display also serves as a deterrent to using the computers for non-class work since no one wants to have his or her private email displayed to the class! More importantly, this program serves an instructional purpose. The instructor is able to focus attention on an assignment or problem from one student's computer by displaying it for the entire class. In some smart classrooms, the instructor also has the ability to manipulate the student displays so that the instructor's data display is projected on all computers. I have not yet had the privilege to teach in a classroom this intelligent!

In a traditional classroom we expect students to arrive ready to work with pen, paper, and textbook in hand. However, since these are not the tools students use outside of the classroom today, we should expect nothing less than students to arrive with computer and Internet ready to use. Since students do not come to class with the same technological experiences and knowledge, part of the benefit of smart classrooms is teaching information technology. The primary benefit, however, is the inclusion of even more learner-centered activities.

Source:
Writing to Learn?
Dr. Aziza Ellozy, Director, Center for Learning and Teaching

A week ago Thursday, I participated in an open forum for AUC faculty where Dr. Duane Gruen (Director, Center for Learning and Teaching Excellence and Professor of English, Arizona State University) and Dr. Christine Hult (Associate Dean and Professor of English, Utah State University) answered questions about “writing in the disciplines”. Dr. Gruen and Dr. Hult were visiting AUC on an invitation from Dean Hopkins (School of HUSS).

Two issues dominated the discussion, namely a) how to address the question of faculty (and TAs) teaching in Arabic, and b) how to build on the writing skills that students acquire through AUC’s ELI, Writing Program etc. which apparently worsen with time. The former topic took up the larger share of the discussion, and although we will not address this issue here, a separate body should be seriously looking into the matter if it is as significant as the anecdotal evidence indicates.

The decrease in writing ability from freshman to senior year is not unique to AUC. Similar problems in American colleges resulted in the “Writing Across the Curriculum” (WAC) movement in the US in the 80’s.

WAC programs typically view writing as an active learning strategy which promotes thinking, and they encourage instructors in all disciplines to include writing assignments in their class presentations. The aim is to have students become not only better writers but also better thinkers and learners in their disciplines. Cognitive psychologists who have examined the relationship between writing and thinking support this claim (Lindemann, 1989). The approach emphasizes what is called “writing to learn” exercises rather than highly polished papers.

Some AUC faculty members present at the forum suggested that a WAC program be considered for our university in the future.

But the question is what can be done now? What special support services are there for faculty in the disciplines who want to do more with writing in their courses? What types of short "writing to learn" exercises might be useful in the disciplines? What support do students (graduates and undergraduates) have when they need to write a research paper?

The answer can be found at AUC's Writing Center (which is part of, but different from, the Writing Program). The Writing Center mainly offers individual tutoring for students, and consultations (or workshops upon request) for faculty.

“I sometimes get calls from faculty members who are absolutely irate 'I've got this student in my class who can't write. What happened? What did you teach these people in English 1?' Well, writing skills atrophy very quickly. Students may have done very well in English 1 or 2, but if they write very little between their freshman and senior years, they're back in the tenth grade by the time they graduate. Writing skills have to be practiced and reinforced if they're to get better.”

(Lindemann, 1989)
Writing Program instructors or other trained tutors can help students with any writing project at any phase of the process:

- brainstorming topics
- locating and evaluating sources
- organizing and outlining essays
- revising, etc.

They can also provide faculty with guidelines that can be helpful to students. “If students are simply asked to write a research paper without guidelines and assignment requirements, then no matter how much training they’ve had, the majority will be lost”, says Jasmine Maklad, Director of the Writing Center.

The Writing Center is located at 5, Youssef el Guindy st, above the AUC clinic.

Sources:


Lindemann, E. (1989). Erika Lindemann on "Writing to Learn". Retrieve May 1, 2004 from The University of North Carolina at Chapel Hill's Center for Teaching and Learning website, “For Your Consideration” series http://ctl.unc.edu/fyc4.html
Reviewing the Effectiveness of your Courses: Data in WebCT

Dr. Aziza Ellozy, Director, Center for Learning and Teaching

“Assessment is an ongoing process aimed at understanding and improving student learning. It involves … systematically gathering, analyzing and interpreting evidence to determine how well performance matches [those] expectations and standards; and using the resulting information to document, explain and improve performance.” T.A. Angelo, November, 1995, AAHE Bulletin v. 48, n. 3, p. 7.

This past week, students have been busy filling their evaluation forms, and once again they may or may not have insightful comments on how your course(s) and/or teaching can be improved. In an ideal situation, you would recognize patterns in their feedback, and should they recur over different semesters, you would act upon them to improve and fine-tune your teaching.

I would like to suggest however that there is an additional and potentially powerful way of reviewing the effectiveness of your courses, which can complement your students’ perspectives. I am referring to the embedded data in WebCT, which can be retrieved and analyzed at leisure when the end-of-semester pressure is off. Although it will not assess your teaching, it can help you review your course and possibly introduce improvements. I am talking specifically about a) the statistics of the quiz tool, b) the data on the page tracking tool, c) the discussion board entries, and d) the student tracking tool.

a) Frequent quizzes and short answer essays can be very useful for formative assessment purposes, and the statistics given by the WebCT quiz tool can help identify questions that may be problematic, as with questions #5 and #8 below, or questions that may be too easy such as #1.

b) The page tracking tool allows you to see how the content pages of your course have been visited. Which pages were visited more than others? Which pages were not visited? Is there a need to restructure some of the content modules?

c) Proponents of online discussion see it as a very valuable tool: it can help students’ writing skills, can motivate shy students into participating and, at its best, can promote students’
critical thinking skills. However getting students to engage in meaningful discussions can be difficult and requires practice. Keeping a record of discussion forum postings is useful in understanding what works best, or simply in preserving good discussion items for the future.

d) The student tracking tool is used primarily to trace individual student use of the various pages or sites. An example is shown below where the online activities of two students (from the same class) are compared with the grades they received during the semester. In this example, there is a correlation between the students’ online activity and their grades, and although these numbers alone may not be sufficient to yield insights on student learning, together with other input they may indicate what you are doing best to enhance learning.

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<tr>
<td>Homepage</td>
<td>186</td>
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<tr>
<td>Content Pages</td>
<td>92</td>
<td>73</td>
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<tr>
<td>Quiz</td>
<td>51</td>
<td>30</td>
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<tr>
<td>Calendar</td>
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<td>2</td>
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<tr>
<td>Other</td>
<td>82</td>
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<td>Discussions</td>
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<td>Articles Read</td>
<td>211</td>
<td>44</td>
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<tr>
<td>Original Posts</td>
<td>24</td>
<td>1</td>
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<tr>
<td>Follow-up Posts</td>
<td>15</td>
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In conclusion, you will soon be asked by Academic Computing Services (ACS) if you would like to archive your WebCT course(s). ACS will archive your course content automatically but if you would like to archive the statistics of any of the tools you have used this semester, you need to request it specifically from them.

Have a great summer and see you again in September ember!
As “New Chalk Talk” resumes its biweekly newsletter, a warm welcome is extended to our new and returning faculty. We would also like to encourage your participation in the discourse about teaching at AUC, and your contribution to our newsletter with articles and/or suggestions.

**Active Learning (I)**

**The Peer Instruction Method**

*Dr. Aziza Ellozy, Director, Center for Learning and Teaching*

During this year’s “Teaching at AUC” panel discussion at the faculty’s “Newcomers’ Orientation”, the talk inevitably led to the challenge of involving and engaging our students in the process of learning. Dr. Robert Switzer (Associate Professor of English and Comparative Literature) specifically asked the panelists to share the insights that they may have or methods that they use in class, which could transform our students from passive listeners to engaged, active learners. Implicit in the question is the recognition that lecturing alone is not sufficient to bring about “active learning.” Research on learning and teaching has shown that certain in-class teaching strategies lead to active learning. The next few “New Chalk Talk” issues will be devoted to those instructional strategies which could be integrated into the lecture.

I will start with E. Mazur’s recognized “Peer Instruction” (PI) method, which he developed and successfully put into practice at Harvard University where he was teaching introductory physics. The method has since been used very successfully by many instructors in the sciences. I used the method successfully in organic chemistry and core curriculum science courses and found it to be very effective. Once I tried it out, I could no longer return to the formal lecture approach.

Following is a description of the method in Mazur’s own words:

“My students now read the material before class. To get them to do the reading, I begin each class with a **short reading quiz**. The lecture periods are then broken down into a series of digestible snippets of 10 to 15 minutes. Rather than regurgitating the text, I concentrate on the basic concepts and every 10 or 15 minutes I project a *(ConcepTest)* on the screen. These short conceptual questions generally require qualitative rather than quantitative answers. The students get one minute to think and choose an answer. They are also expected to record their confidence in their answer. After they record their answers, I ask the students to turn to their neighbors and to convince them of their logic. Chaos erupts as students engage in lively and usually uninhibited discussions of the question. I run up and down the aisles to participate in some of the discussions—to find out how students explain the correct answer in their own words and to find out what mistakes they make. After one or two minutes, I call time and ask students to record a revised answer and a revised confidence level. A show of hands then quickly reveals the percentage of correct answers. After the discussion, the number of correct answers and the confidence level typically rise dramatically.
If I am not satisfied, I repeat the cycle with another question on the same subject. When the results indicate a mastery of the concept, I move on to the next subject.” (Mazur, 1997)

In summary, the PI method

- limits lecturing to about 20 minutes (which is the attention span of most students as indicated by research)
- allows students to engage with the concepts, to discuss it with their peers and to evaluate their reasoning (all of which improve comprehension)
- serves as a class assessment technique which gives the students immediate feedback and the faculty the opportunity to address concerns immediately.

Although the method has been tested mostly in science teaching, it can be adapted to any discipline.

A library of thousands of ready made ConcepTests is available for physics, biology, chemistry, astronomy, mathematics and geology. For anyone interested, examples of Conceptests can be found at: http://galileo.harvard.edu/, or in a simple Google search by typing “Conceptests.”

**Sources**

Also available on-line at http://ctl.stanford.edu/Tomprof/postings/149.html

Despite the fact that I taught for several decades in a sociology department and believed that I had attained a degree of professionalism in this field, it was Gilly Salmon, a leading British pedagogist who teaches at the Open University (UK) that recently drew my attention to the importance of the work Emile Durkheim, a leading French sociologist, in respect to my quest to enhance quality learning in my classes. Writing more than a century ago, and with reference to his seminal work on collective representation, “Durkheim showed that a sense of security and progress depends on broad agreement both on the ends to be pursued and on the accepted means of attaining them.” (Salmon, 2000: 28) Thus, it was Durkheim’s work, a sociological account of the consequences of socialization and its implications for human behavior that motivated me to explore the benefits to be derived from perceiving my class as a “learning community” with its own distinct learning culture, formal and informal rules and norms and behavior.

From there it was only a short step to the recognition of the significance of “cooperative/collaborative learning” as a dynamic and innovative way of enhancing quality active learning among my students. The key to attaining active learning, therefore, was the process of enabling and/or empowering my class of individual students to transform into a “learning community” composed of “cooperative/collaborative learners”. In this respect the individual students were now being compelled to interact in three different ways through the pedagogic socialization process: interaction with courseware, interaction with me and, of greatest significance, interaction with their peers. This process quickly generated its own momentum and again of critical importance an acquired sense of “ownership” with regard to knowledge construction and thus also a sense of “power” that implicitly re-negotiated the conventional and hierarchical parameters and boundaries of the teacher-student relationship. Students derived their empowerment from the very process of establishing their own “learning community” which was facilitated by the instructor, but not awarded.

The learning benefits to be derived from such a process are captured by Rowntree who notes that:

Participants are liable to learn as much from one another as from course material or from the interjections of a tutor. What they learn, of course, is not so much product (e.g. information) as process – in particular the creative cognitive process of offering up ideas, having them criticized or expanded on, and getting the chance to reshape them (or abandon them) in the light of peer discussion. The learning becomes not merely active…but also interactive. The learners have someone available from whom they can get an individual response to their queries or a new idea and from whom they can get a challenging alternative perspective. In return, they can contribute likewise to other colleagues’ learning (and themselves learn in the process of doing so). (Rowntree, 1995:207)

A central issue in this process of active and/or interactive learning is that the locus of power in the learning relationship is no longer with the instructor, professor or academic expert. In “cooperative/collaborative learning,” that takes place within a “learning community of peers,” the conventional hierarchy is replaced by a “flattening” of the communication
structure between professor and students. In this respect the learning process can achieve knowledge construction as compared to information dissemination which is the hallmark of most conventional lecturing methods. This is clearly encapsulated by Jonassen who notes that:

…groups can work together to solve problems, argue about interpretations, negotiate meaning, or engage in other educational activities including coaching, modeling, and scaffolding of performance…knowledge construction occurs when participants explore issues, take positions, discuss their positions in an argumentative format and reflect on and re-evaluate their positions. (Jonassen et al., 1995: 16)

“Cooperative/collaborative learning” therefore also enhances critical thinking as it enables learners to challenge and be challenged within a non-hierarchical social environment in which they share a “sense of security”. This enables the “learning community” to even challenge the interventions of the instructor or professor, especially if they deem them to be unhelpful. In this respect the learners are also making use of a constructivist approach to learning which involves learners exploring the way in which they articulate thoughts and especially the manner by which they construct knowledge. The key here is that learners attribute meanings or interpretations to “information” provided by course ware or lectures by reference to conceptual structures that have derived from a process of social and intellectual negotiation and re-negotiation within the “learning community” and thus significantly different from “conceptual baggage” they carried upon arrival. The process of active learning has been initiated.

There is a plethora of benefits to be derived from adopting “cooperative/collaborative learning” and facilitating “learning communities” as a central element of our teaching style. Of particular importance is the fact that it also enhances the “employability” of our students as it mirrors almost exactly the requirements of contemporary businesses and organizations. Here again Gilly Salmon has captured these requirements when she notes that:

Skills needed for work and learning will embrace self-direction together with a willingness to support others, the ability to work in multi-skilled teams (which are likely to operate without regular meetings), to co-operate rather than compete, to handle information (rather than know everything) and to become critical thinkers. (Salmon 2000: 91)

Salmon then concludes by quoting the Senior Learning and Development Adviser for Shell who suggests that:

…a change of learning mindset is needed. He wants future recruits to be able to know how they learn, know what they need to learn and be open and receptive to learning from others without negative responses to criticism. (Salmon, 2000: 91)

“Cooperative/collaborative learning” enables such a change of learning mindset to take place. The question that does remain however is: Are professors willing to meet the challenge?

Sources

How to Encourage Preclass Reading: The web-based discussion

Dr. Aziza Ellozy, Director, Center for Learning and Teaching

No one would argue that in-class discussions improve when students read and think about their texts before class. But one of the most common questions that I have been asked by several faculty members is: “How do you get students to read the assigned texts before coming to class?” This is not a unique problem with AUC students, and a very similar question (“How to get students to prepare for class”), posted on a discussion list of a faculty development site on the internet, elicited a large number of responses. A few of these follow:

- “Require each student to bring in a "good" discussion question covering the material of the day.”
- “Assign students to take a turn as class discussion leaders (may need to "train" them), giving them part of the responsibility for leading and carrying on discussions.”
- “Have students do a minute paper at the beginning of the class: What was the most difficult/ambiguous point in the reading? What was the concept you liked best/found the most exciting in the assignment?”
- Give “students…questions [that] require them to synthesize and try to do something with the material, not just skim the chapter to find the answers”.
- “Allow students to generate possible exam questions from the readings. Be willing to actually edit and use some of these on the exam”.
- Give a “10-minute quiz at the beginning of the class period based on homework readings’.
- “Have your students use electronic mail to exchange ideas about the readings or discussion topics before the class meets”. One participant talked about how email “enabled me to get student debates and discussions going before class meets, so that by the time we congregate, students have already begun to define their ideas in relation to the material ...”

This last idea has evolved into the more structured Web-based discussion, a method that is increasingly being adopted by faculty and is found to enrich in-class discussions when applied successfully.

Harvard University’s Professor G. Nagy is one of the early adopters of this discussion method, and has used it in his course, “The Concept of the Hero in Greek Civilization”, one of the most popular courses in Harvard’s Core Curriculum. To an already rich and interactive course website, Prof. Nagy and his teaching assistants added and developed the discussion forums that became an integral and required part of the discussion section.
Each week, a Web discussion question or topic was assigned, and students were required to post a response before the meeting in which the text was to be discussed. Part of the students’ preparation included reading their peers’ responses and, at times, commenting on them. Each student's contribution to these Web discussions is factored into his or her grade.

Faculty that have used this approach have found that students come better prepared to class and that the live discussions start off from a higher intellectual level. This approach has also other advantages over the more common one-page response or reaction papers: instead of the latter being exclusively read by the teacher, tutor or teaching fellow, the students get to talk to one another and read each other’s responses. In addition, while reaction papers are typically returned one week after they are submitted, feedback with web discussions is more immediate.

Leading a discussion on line offers some challenges, and future New Chalk Talk issues will discuss strategies on how to do this effectively. In the meantime, WebCt has a discussion tool that is quite easy to use. It offers the benefit that posted messages can be organized into topics or "threads" and can be easily archived. Any faculty member not using WebCt at present, and wishing to use the discussion tool only, can contact us and we will arrange for individualized training. We would welcome comments or suggestions from our faculty who are already using this discussion tool or any other.

Sources:
Responses from POD (faculty development) discussion list on “Encouraging Students to Prepare for Class”, Center for the Advancement of Teaching at Illinois State University
http://www.cat.ilstu.edu/teaching_tips/handouts/pod.shtml

Ramazani J., (1994) Student Writing by E-Mail: Connecting Classmates, Texts, Instructors, Teaching Concerns, Newsletter of the Teaching Resource Center of the University of Virginia

Cooperative Learning (1)

Dr. Aziza Ellozy, Director, Center for Learning and Teaching

One of the mandates of the Center for Learning and Teaching at AUC is to encourage an ongoing discussion about teaching and learning on campus. As a first step, we began publishing this newsletter as a means of promoting successful teaching strategies as well as addressing teaching and learning issues that face our faculty.

Taking my cue from last fall’s Newcomer’s Orientation Program, I focused my attention on topics that appeared to be of interest to our faculty: assessment, critical thinking, plagiarism/cheating and teaching with technology. This was a good start and, in our previous issues, we touched on these important topics.

The Newsletters have generated other queries from faculty members, as was reflected in our last issue (Volume 2, Issue 1: How to encourage pre-class reading). Today’s subject matter is a response to a colleague and friend who approached me with questions regarding an interesting group assignment she was giving to her class. Her questions addressed important features of what is known in the literature as “cooperative learning”, an important learning strategy to which we are devoting this issue and the next.

Most research on cooperative learning (Johnson, Johnson, and Smith, 1991) has shown that it helps students learn best and retain information longer, develop their critical thinking skills, and provides opportunities for them to interact with each other as they would in real life situations.

What is cooperative learning and how can it be applied successfully?

Broadly defined, it is learning that occurs when groups of students are given a specific task and work together toward a common goal.

There are many features of cooperative teaching that already occur in AUC classrooms, such as open discussions, interactive lectures and case studies, which do not necessarily involve group work. Cooperative learning is implemented either through informal study groups that involve very little structure or through more formal learning groups that work together for an extended period of time to complete a specific task. We shall be addressing the latter type of cooperative learning where the groups are highly structured and task oriented.

The successful application of cooperative learning involves three key aspects: the group, the task and the assessment.

B) The group.

Size: According to Johnson, Johnson and Smith (1991), the highest level of success occurs when the groups are kept small. Groups of two to three maximize the students’ involvement and create a sense of interdependency.
Composition: The choice of the group should be the instructor’s responsibility: left up to the students, they will probably choose their friends which may lead to a situation where they neglect their work in favor of some other activity. It is recommended to form groups of heterogeneous ability levels. In such groups, the brighter students' learning is enhanced when they teach others, and the less-capable students benefit from the one-to-one attention.

Group management: In general, we should not assume that students know how to work effectively in groups. Teachers need to proceed slowly and with patience to help them develop cooperative skills, such as a willingness to help one another and to participate equally in the group work. This is often an obstacle because students find it difficult to let go of the competitive attitude they acquire in school towards fellow students. Some educators recommend having groups evaluate how they are functioning by having them answer questions such as: what could each member of the group do to have the group function better?

To be continued

Sources:


Cooperative Learning (2)
Dr. Aziza Ellozy, Director, Center for Learning and Teaching

An accepted wisdom in higher education is that students’ learning depends mostly on what they do in and out of class and not on what the instructor does, i.e. they learn best when they are involved in their own learning. This kind of learning has been coined “active learning”. The last New Chalk Talk issue (Volume 2, issue 2) addressed the subject of cooperative learning as a strategy that could be conducive to active learning when it is implemented properly. As mentioned, the three most important aspects of cooperative learning are the group, the task and the assessment. This issue will address the last two features.

B) Creating and evaluating effective group tasks/assignments
A well-designed assignment is essential for the success of the method. The following cooperative learning project was adapted from an example found on the internet. We will use it as an illustration.

A group of three students will be assigned to investigate an issue of bioethics. Members of the group will be asked to cooperate to learn about the personal, scientific, social, and ethical dimensions of the issue and prepare to participate in a debate on the issue. Class members are to be presented with a two page summary of the results of the group’s investigation and given at least two days to prepare to debate the issue in class. The three students will a) participate in the debate and b) will present a summary of the debate in written form.

1) Explaining the task:
As with regular assignments, the instructor should write out the requirements. The goals of the assignment should be concrete, and the instructions to the group should be clear, including instructions on how the students will be graded. In the above description, the latter was not addressed nor was the bioethical issue explicitly spelled out. More concrete explanations are definitely needed unless they are added as the project progresses.

2) Designing the task:
A properly designed task should contain some key elements of cooperative learning, namely positive interdependence, individual accountability and promotion of face-to-face interactivity.

a) To create “positive interdependence”, students need to depend on each other for the project to be completed. Using the above example, the students are asked to produce a single product (“a two page summary of the results of the group’s investigation”, “a summary of the debate in written form”) which leads to goal interdependence. The task implicitly allows for a special role to be assigned to each person (role interdependence: “learn about the personal, scientific, social, and ethical dimensions”) and for the group to be responsible for each person’s correct knowledge of all aspects of the problem (learning goal interdependence: “The three students will … participate in the debate”). Finally, the task requires more than one point-of-view, set of data or background (resource interdependence).
b) A high level of individual accountability for group members should be structured in the task. One way of ensuring that students are held accountable is to give individual quizzes or randomly calling on a student to present their group’s answer, method, etc.

c) Asking open-ended questions or questions with multiple answers encourages interactivity. Different viewpoints are expressed and students provide feedback to one another and challenge one another’s conclusions, creating a great deal of discussion among group members.

3) Evaluating group work

a) Create a set of criteria or rubrics against which students can measure their product(s). Members of a group should receive immediate, unambiguous and meaningful feedback (preferably involving direct comparisons with the performance outputs from other groups). In general, the more immediate the feedback the better it is at promoting team fusion.

b) The use of group grades is controversial, but Johnson, Johnson and Smith (1991) report good results from encouraging a "we sink or swim together" approach. Group work grades may constitute 5 to 30% of the total grade.

c) Individual student learning has to be evaluated the usual way through written exams, papers, oral presentations, quizzes or the like.

d) Finally, members of a group should be taught how to evaluate each other’s contribution, which should be included in the individual student’s evaluation.

Sources:

A. Knight, L. D. Fink, and L. K. Michaelsen, “Designing Effective Group Activities: Lessons for Classroom Teaching and Faculty Development”, University of Oklahoma, Published in "To Improve the Academy", Volume 16 [1997]

Cooperative Learning (3)

Experimenting with Cooperative Learning at AUC

Dr. Aziza Ellozy, Director, Center for Learning and Teaching

“One way individual faculty members can begin to reform undergraduate education is through the use of strategies promoting active learning in the classroom. To do so successfully, each must personally confront the issue of taking risks…” (Bonwell and Eison, 1991)

Collaborative projects are not new at AUC. For example, the Engineering and Computer Science departments offer two-semester courses devoted to capstone projects that involve teamwork, and group work is standard procedure in the Management department. But the two examples we are addressing here are examples of faculty members (from departments where group work may not be the norm) who are willing to take risks and to try out in-class strategies that have been shown to improve student learning.

Dr. Soraya Altorki, Professor of Anthropology, and Dr. Fadel Assabghy, Dean of the School of Sciences and Engineering and Professor of Physics, have both recently experimented with cooperative learning in their classrooms (Anthropology 210, Arab Society and Physics 327, Electronic Instrumentation respectively). It was Dr. Altorki’s initial questions to us that inspired the New Chalk Talk series on cooperative learning (Volume 2, Issues 2 and 3). After having read about it in the newsletter, Dr. Assabghy decided to try out the method in his course. They have kindly agreed to share their experience with us.

From the start, the aim of each professor was different. Dr. Assabghy was going to use it for an in-class design exercise which would also serve as an opportunity to examine the outcome of such student-student collaborations. Dr. Altorki, on the other hand, was going to have her students work collaboratively on a research paper over a period of two weeks.

The groups

In both cases, the groups were randomly chosen. Dr. Altorki divided her 38 students alphabetically into six groups (two of them had seven students), which were then subdivided into two subgroups A and B. Dr. Assabghy’s 22 students were also randomly divided into groups of 3 students each.

The Task

Dr. Altorki asked each of the six groups to monitor, on the internet, every issue of one of the following six newspapers for a period of two weeks: The NY Times, The LA Times, The Washington Post, The Christian Science Monitor, The Jerusalem Post and Haaretz. (One of the newspapers had to be dropped because of subscription requirements and replaced by The Guardian). Subgroup A of each group would track the Editorials, and subgroup B the “Letters to the Editor”, to find those pertaining to the Arab world. Each group was to examine these Letters or Editorials, and report on how the Arab world is perceived in those publications. Each group
would be graded on a collective essay written by members of the group, as well as on the portfolio of the Letters or Editorials. Each member of the group would receive the same grade.

**Dr. Assabghy** gave the following collaborative graded design problem: “The control of temperature in the New Falaky Building is independently adjustable in every room in the building. This is achieved by first cooling the air to temperatures below comfort levels ($T_{bc}$) by the Central Air Conditioning system which circulates air throughout the building. Then at the exit to each room, the air is made to flow through an electrical heater which brings the cold air to the desired Comfort Temperature ($T_c$). [This explains the smell of burning dust which is sometimes noticed when the heater first comes on]. The Comfort temperature can be adjusted by ON/OFF control of the heater. [There is a distinctive clicking sound that can be heard when the relay switches]. This is a Thermostatic Temperature Control system or Thermostat.

Design an Electronic Thermostat that will control ($T_c$) to settings between 18°C and 35°C, +2°C. A bipolar dc supply of 15 V is assumed to be available. The heater is powered from a separate ac supply at 220 V 50 Hz.

**Dr Assabghy went one step further and invited me a few days later to talk to his class to allow me to get the students’ feedback.** He did not want to be present, so that the students could talk freely, a somewhat risky proposition that had, however, a very positive effect on students.

**The assessment**

Like with any experiment, one cannot come to a definite conclusion after just one trial, but the verdict from both professors was that the method has great potential, and that they were planning on continuing to use it. Dr Altorki was impressed with the large effort that most members of the groups put into their project, and Dr Assabghy was pleased with the spirited interactivity of the students, and how engaged they became as they went about solving their design problem.

As expected, they also identified things that needed to be refined. Dr Altorki, for instance, felt that she should allow her students more in-class time for group discussions, and that she should monitor their progress in between. Faculty who use the method (Davis, 1993) recommend that some class time be devoted to that purpose. This allows the students to organize for out of class meetings to discuss different perspectives, divide the work load, edit or proof-read their common paper etc. (Online technology could be a great help in this respect and students could meet in virtual group discussions).

To the uninitiated, the most difficult part of collaborative work is group grading because of “free-loaders”. Both Dr. Assabghy and Dr. Altorki expressed some reservations about it, and some students in both classes did not like it. Experts have many suggestions to offer in addressing this issue, and we will be examining these in future workshops and/or newsletters.

**Sources:**

A new academic year has started and the Center for Learning and Teaching would like to welcome you all back. One thing is particularly different this year which you will notice soon enough if you haven’t already: the administration and the Provost’s Task Force on Academic Integrity have embarked on a serious campaign to promote the university’s commitment to the highest standards of academic integrity among all its constituencies: students, faculty members (full-timers and part-timers), teaching and research assistants, technicians and staff members. The provost, Dr. Tim Sullivan, and our new president, Dr. David Arnold, are among the staunchest supporters of this initiative.

The message was made loud and clear this last weekend during Student Orientation and during New Faculty Orientation. It will be reiterated again next week during the TA’s and RA’s Orientation sponsored by the Center for Learning and Teaching. It is therefore only fitting that our first newsletter of the academic year be dedicated to this effort.

The issue of academic integrity is multifaceted and we would encourage anybody involved in the teaching and learning process, who wants to learn more, to visit the new Academic Integrity website that is being launched next week. Right now, we will report on some of the progress made on one aspect of academic integrity, that of plagiarism.

Recognizing that plagiarism is and continues to be a major form of dishonesty in laboratory reports, term papers, and assignments, the Task Force on Academic Integrity recommended last January that AUC acquire the popular plagiarism prevention system, Turnitin.com. We present here the results of our first experience with the software for the Spring 2003 semester.

Forty-six faculty members from all three schools opened accounts and attended the Spring workshops. Of these, thirty-six instructors had their students submit papers, and the results are summarized in Figures 1 and 2.

The Writing Program, was responsible for the bulk (85%) of the submissions, followed by the Biology department (5%) (Fig.1). The most encouraging result of all is that 91% of all submissions show that the extent of plagiarism was less than 25% (Fig. 2).

It appears therefore that Turnitin.com has been effective in deterring plagiarism in this first trial. The Writing Program instructors also feel that it can be a powerful learning tool and will be presenting workshops to this effect. Therefore we strongly encourage AUC faculty (including part-timers) from ALL departments to use this software for term papers,
assignments or laboratory reports submitted for their courses. This will act as a deterrent and would allow us to create a database of AUC materials on Turnitin.com, thus permitting teachers to spot recycled papers and lab reports.

Figure 1

Figure 2
Learning and Teaching Styles

Dr. Aziza Ellozy, Director, Center for Learning and Teaching

Each one of us has a personal “learning style” which characterizes the way we collect and process information and the way we interpret this information. Researchers have classified these learning styles into various categories, and understanding them is useful for the college instructor.

To all of us who teach, it is apparent that it is difficult to address the needs of all students at all times; more often than not we are unaware of what our students’ “learning styles” are.

It has come to our attention that Dr. Herb Thompson, Professor of Economics and Chair of the Economics department, devotes his first assignment to discovering exactly that. He asks his students to fill an on-line questionnaire on Learning Styles and to hand him the results of this questionnaire. We have asked him to write a piece on “learning styles” for our New Chalk Talk series. We have also asked him to share the results of the questionnaires which he has conducted over two semesters in his Microeconomics class. Dr. Thompson has agreed to do this and for that we thank him very much. New Chalk Talk will devote the next two or three issues to this subject. They will appear starting next Tuesday.

We would like to encourage all faculty members to contribute to the New Chalk Talk series by sharing teaching and/or learning experiences.
Learning and Teaching and then, Learning All Over Again** (Part I)

Dr. Herb Thompson, Professor and Chair, Department of Economics

"...there is no teaching anything to wise men...They know everything, --oh, to be sure! --
everything that has been, and everything that is, and everything that, by any future possibility, can be. And, should some phenomenon of nature or providence transcend their system, they will not recognize it, even if it comes to pass under their very noses." (Hawthorne 1852)

I don’t think my experience is too unusual in that I started to teach at the tertiary level while in the midst of finishing my thesis and completing the PhD. I had never had a course in education or psychology and was effectively told on the first day, what my teaching schedule was and how to get to the classroom. Of course, it’s getting better now, but I remain convinced that most of us taught ourselves to teach - and the quality of that learning experience was (and remains) continually diluted by all the other pressures of academic life.

Of course an academic has to do what an academic has to do -- so I concerned myself from the beginning with learning about teaching, again mainly from talking and listening and trying things out in the classroom on my own. I came to enjoy teaching very much so probably spent more time working on it than was healthy career-wise. Finally, after about 25 years I figured I had worked it out and then in 1995 I was confronted with the joy, excitement, horror, fear, and so on ...of computer-mediated learning. I accept the unalterable fact that to be relevant right now, the computer is essential to the mediation of teaching and learning. What I was finally comfortable with in 1995 must now be re-thought, re-examined, and revised, if not thoroughly re-invented.

I share these thoughts.

Firstly, within a decade, my memory bank has been extended with digital media from a basic unit of portable dissemination of 100,000 words (an average book) to a 5.3-gigabyte digital videodisc (equivalent to 5,300 books) (Murray, 1997). This alone suggests that entering today’s workforce or an institute of higher learning requires fluency with both software and computer hardware. Word processors, spreadsheets, databases, search engines and computer-aided design programs are the tools of contemporary workplaces, soon to become ubiquitous.

The effects of new educational technologies, with particular reference to the past decade, have already profoundly altered the experience of higher education. Students now have to learn how "to manage their own learning processes to an unprecedented degree...to swim in a sea of information..." (MacFarlane, 1995). Yet, educators still give lectures that are almost entirely spoken, last too long, show little understanding of how we learn, take place in inappropriate environments, and are rarely differentiated or targeted to a particular group of learners.
Producing knowledge is not a matter of stuffing one’s head with information. It is complex and subtle, with a variety of characteristics including imagination, hypothesis testing, discrimination, estimation, purpose, and reflection. None of these is a separate stage or skill that can be taught in isolation (Smith 1988: 99).

As part of my “re-tooling experience” new evidence has come to my attention about the nature of intelligence and the range of learning styles. As a result of Howard Gardner's work (Gardner, 1999; Gardner, 2001; Gardner, et.al. 1996); I have come to accept, in principle, the notion of multiple intelligences as a working hypothesis in the classroom. Gardner’s multiple intelligences are:

1. **Linguistic**: People with this kind of intelligence enjoy writing, reading, telling stories or doing crossword puzzles. Micro-processing and accessing libraries and datasets come easy for this group.

2. **Logical-Mathematical**: People with primary logical intelligence are interested in patterns, categories and relationships. They are drawn to arithmetic problems, strategy games and experiments.

3. **Bodily-kinesthetic**: These people process knowledge through bodily sensations. They are often athletic, dancers or good at crafts such as gardening, metalworking or woodworking and computer programming.

4. **Spatial**: These individuals construct ideas in images and pictures. They may be fascinated with mazes or jigsaw puzzles, or spend free time drawing, painting, building, or daydreaming.

5. **Musical**: The musically inclined are extremely sound, melodic and rhythmic oriented; usually picking up sounds others may miss. This often provides for discriminating listeners.

6. **Interpersonal**: Individuals who are leaders among their peers, who are good at communicating and who seem to understand the feelings and motives of others and are excellent at collaborative effort.

7. **Intrapersonal**: While they may appear shy or withdrawn, they are very conscious of their own feelings, and are self-motivated. Their abilities are largely independent with a preference to participate without confronting face-to-face environments.

8. **Naturalist**: This group is very adept at discovering patterns in nature’s immense diversity, making connections, synthesizing and envisualising the “large picture”, setting up expectations and raising questions. Darwin’s evolutionary theory, Mendeleev’s periodic table, Fibonacci numbers, and the familiar nighttime constellations all provide examples of this ability.

Intelligence quotient tests (and our examining processes) largely deal with verbal-linguistic and logical mathematical intelligence. The point at issue is that a basic understanding of multiple intelligence theory should modify lecturer behavior and utilization of computer-mediation. Time spent appealing to, or at least considering, at least two intelligences not associated with normally perceived intelligence quotients in every presentation given may dramatically improve the necessary connection with learners, whether face-to-face or virtually. *(To be continued)*
Sources


Learning and Teaching and then, Learning all Over Again** (Part II)
Dr. Herb Thompson, Professor and Chair, Department of Economics

Seymour Papert (Papert 1993; 1996) believed that computers are partners in thinking and can be used to create user “micro-worlds”, where inquisitive students learn through a process of exploration and discovery. Computers invite teachers/learners to tackle more complex tasks and to ask new and different kinds of questions collaboratively (Murray, 1997). I am not suggesting that computer-mediated technology inevitably gives rise to multi-logical learning, new, splendid forms of community, or other goodies hawked by the evangelists, but it does open up possibilities for students to utilize their various intelligences.

Some people see the Internet as a new way to deliver information; others look at the Net as a huge database for students to explore. A third and very different vision is to see it as a medium for collaborative development - a new opportunity for learners to discuss, share, and collaborate.

The first vision sees education as formal instruction, but the second and third are clearly more "learner centered", based on an understanding that people actively construct knowledge from various experiences and explorations. The third vision also puts special emphasis on learning activities, based on the understanding that people assemble knowledge with particular effectiveness when they are actively engaged (Resnick and Rusk 1996).

To use the Internet as simply another way to “push” information at passive learners is to engage in an anachronistic waste of this powerful tool (Crook, 1997). One must encourage dialogue and response, guide attention to key points in the discussion, scaffold strategies for questioning, monitoring and elaborating, all aimed at getting learners to think in increasingly complex ways about alternative interpretations.

It is not the technology alone affecting minds but the whole “cloud of correlated variables” technology, activity, goal, setting, teacher’s role, peer groups, cultural content exerting a combined effect. Human biological evolution, now best understood in cultural terms, must incorporate the consciousness that tools and machines are inseparable from evolving human nature (Castells 1996).

A new form of understanding and wisdom is possible by combining the brain and computer in symbiosis (See, for instance, Berge and Collins 1995; Crook 1997; Jacobson, et.al.1996; Postma, et.al.1998; Schutte 1998; Yakimovicz and Murphy 1995). The challenge for teachers/learners is how to combine the strengths of the computer (brute force of computational speed, multimedia combinatory potential, and storage recall) with the human

** This is a short synopsis of an earlier piece: Herb Thompson 2002 “Cyberspace and Learning”, Electronic Journal of Sociology, http://www.sociology.org/content/vol006.001/thompson.html
brain (creativity, imagination and lateral complex consciousness) in a constructivist project for teaching/learning.
Give me another 25 years and I think I'll get it.

Sources


Learning Styles, Strategies and Practice: “You’re OK, I’m OK, We’re Just Different!”
Dr Herb Thompson, Professor and Chair, Department of Economics

I remind you of my main premise - that there may be as many different learning styles in a classroom as there are people, which should directly impact on the way I organise my teaching. I now share with you a little exercise (based on the work of others) that is helping to move me in the direction of not only respecting the differences between students, but also between me and my students. I use the exercise to assist me to overcome my weaknesses in promoting the value and validity of differences in teaching/learning.

Not too long ago I came across the research, experimentation and results of the work by Richard M. Felder (Professor of Chemical Engineering) and Barbara A. Solomon (Coordinator of Advising), both at North Carolina State University. They have developed a questionnaire and used it numerous times to delineate engineering students amongst four dichotomous pairs of learning styles. The four pairs are: 1) Active and Reflective Learners; 2) Sensory-based and Intuitive Learners; Visual and Verbal Learners; and 4) Sequential or Global Learners. I recommend an examination of their efforts at http://www.ncsu.edu/felder-public/ There is a great deal of information on that site which includes a description of styles, an online questionnaire, a summary of results and their meaning, and suggestions to those learners, with different styles, as to how they might enhance their particular skills in the classroom and study habits.

Of course there are numerous “ifs” and “buts” in the results of their work, but so far I have found the questionnaire a most practical and useful tool to get a mental image of the groups I teach. It is a web-based exercise in which the students fill in a questionnaire, submit it for electronic grading and summation. The results are immediately provided back to the student with explanation of their learning style location on a bar chart. I then ask each student to either email me the results or print-out the results and give me a hard copy. Then I, or a research student, collate, summarize, group them, and construct a “mental map” of student learning preferences in that particular class. Should anyone or small group of students stand out as exceptionally biased toward one style more than another, I log it to make sure that I construct the class so that the needs of as many students as possible are provided for, without, I must say, undo additional effort. I can hardly say that my results are significant in that my sample of classes and total students participating remain small. But I am pleased with something that continually forces me to think about what I’m doing in the class.

Having used it at AUC for one year, the following results are mirrored by the questionnaires filled in by my students to date. As I assert, these results are more anecdotal than analytical but may provide room for consideration. Almost all of the students, in my first-year economics course, tend toward an extreme end of the spectrum of “visual” rather than “verbal”. One or two students in each class stand out at the extreme end of “intuitive” whereas most of the others fall within a
“balanced” position between “sensory” and “intuitive”. The other categories are fairly balanced as well. There does not appear to be a significant gender difference in learning styles. Initially, there is both a positive and somewhat alarming conclusion to draw from the initial data sets for my students. The positive is that most economics classes are very visual (graphs, charts, symbols, schematics, models and flow charts). Therefore, one would expect visual learners to be satisfied in an economics class. However, of concern is the fact that so few students have an intuitive bias, given the abstract and theoretical nature of economics, particularly at the introductory level. My response, in this instance, must be to continually give specific examples as to how the theoretical concepts actually apply in practice. But in a global sense, if economics turns off practically-minded, sensory-based learning groups, then it could go towards explaining why the discipline has lost/is losing so many students to more “practical”, “sensory-based” courses in business and finance during the past decade. The other point to mention is that the “intuitive” thinkers were among the best in the economics class. All of which begs another question. Do students come to economics with particular learning styles already ingrained; or does an education in economics develop/push a bias towards a particular learning style?

There are definitely problems with both the questionnaire and somewhat simplistic delineation into dichotomies. The students have identified what are probably two important causes of bias in the results. First, I hand out the questionnaire the first week, i.e., before students have had a chance to suss me out or generate any semblance of trust in the classroom situation. Therefore, it is quite likely that they may be answering the questions as they think they are supposed to answer them rather than what they really think. For instance: “For entertainment, I would rather (a) watch television; (b) read a book.” And the other weakness (identified by many students) is implicit in the same question. Most of us would probably answer “It depends!”

Consequently, I accept that one must be very careful in proceeding along this path and not start an upheaval in the classroom as another passing fad. But to acknowledge the differences in learning amongst our students, to acknowledge that everyone does not pursue knowledge in a manner similar to our own particular style, and to accept that knowledge production comes in many forms is the first step to taking our job seriously.

Not to lose the woods for the trees, grading is primarily a credentialing practice, not an indication that “learning” is or isn’t taking place. So when you hand out your next final assessments, you should be reminded that you are grading yourself as well as the class – which could be yet another reason for “grade inflation” 😊
WebCT: Our Students Want More of it
Dr. Aziza Ellozy, Director, Center for Learning and Teaching

If you have attended the successful WebCT day organized by Academic Computing Services (ACS) three weeks ago, you would have heard at least two faculty members mention that their students were “technophobic”. A survey conducted jointly by ACS and CLT last spring, shows otherwise. A full report on this survey will be available soon. In the meantime, here is a highlight of some of the results.

A. A majority of students quickly felt comfortable using WebCT.

B. A majority of students would like to see WebCT used in their future courses.

The most frequently occurring written comment: use WebCT in more courses

Samples:
- “make it accessible for ‘all’ courses”
- “It should be mandatory for all professors to use WebCT as part of their approach to teaching.”
- “…encouraging instructors to use more frequently…”
- “put more courses in it”
- “teach all instructors how to use it and force them to it. I mean

A representative sample of 400 students was needed, and an unexpected 1221 students responded. The survey was posted online on the students’ WebCT accounts.

C. WebCT’s advanced features were popular with students when used, but many instructors do not use them.
D. Despite the overall satisfaction with WebCT, students were neutral when it comes to judging its effectiveness as a learning tool.

This is an interesting and significant result. Research by others in the last ten years has shown that technologies allow us the flexibility to try out different strategies that promote student centered learning. Although the above results indicate that students are receptive to WebCT, they also indicate that we, as faculty, can reflect on how to design more effective learning experiences in order to explore the full potential of WebCT (or other technologies).
A New Center and a Welcome from the Director

Dr. Aziza Ellozy, Director, Center for Learning and Teaching

Welcome back to all and I hope you’ve had a great summer. As we start this new academic year, many of you are finding out that AUC has established a new Center for Learning and Teaching (CLT), and that I have the honor of serving you in the capacity of Director of this center.

You may also be wondering what a Center for Learning and Teaching does. In a nutshell, its main function is to promote the effectiveness of the learning and teaching experience among all those involved in the process. We will do so primarily by providing instructional design and consultation for faculty and by assisting faculty (and students) in integrating technology into their classroom. What CLT will not be doing is evaluating individuals for the purpose of promotion, tenure, renewal of contract or salary.

By deciding to launch CLT, AUC underscores its leadership role in its commitment to excellence in teaching. This center will be the first of its kind in Egypt, and possibly in the region. In the United States, the history of teaching centers at colleges and universities dates back to the early seventies. Today, more than 260 such centers are found at liberal arts colleges, large state and private universities, including Harvard, MIT, Yale, Brown, Columbia and Stanford, to mention a few. If interested, you can find the links at the following URL: http://www.ku.edu/~cte/resources/websites/unitedstates.html

Our first order of business will be to meet with as many of you as possible to hear what the center can do for you, and to establish our priorities accordingly.

In preliminary talks with some faculty, concern was expressed about the time involved in learning and using new technologies. Responding to this concern, a pilot program will be initiated this semester. The program aims at hiring graduate students (and eligible undergraduate students) and training them under the direction of Academic Computing Services to assist interested faculty members in preparing instructional materials and/or using WebCT in their courses. At the end of the fall semester, there will be an evaluation of the program and recommendations will be made. This program will be an example of how the center will function. As the main contact for faculty in issues of teaching and instructional technology, we will coordinate our services with those offered by other Libraries and Learning Technologies departments. I look forward to hearing from you.
Classroom Assessment Techniques (CATs): The Minute Paper
Dr. Aziza Ellozy, Director, Center for Learning and Teaching

During this year’s Newcomer’s Orientation, the session on “Teaching at AUC” was dominated by four topics: assessment, critical thinking, plagiarism/cheating and teaching with technology. These are indeed important issues in our discourse about teaching and learning, and we will devote the next few issues to them.

Starting with assessment, some of the simplest and most effective ways of collecting feedback on student learning have been compiled by A. Angelo and P. Cross (1993) and have been collectively called “Classroom Assessment Techniques“ or CATs. They are simple strategies that college teachers have found useful in answering such basic and intangible questions as "How effective was I today?” or "How well have my students grasped the material?”

The Minute Paper is the most commonly used CAT in college classrooms, and according to R. Light (Director of the Seminar on Assessment at Harvard), the most successful classroom innovation at Harvard (2001). It is a simple, non-graded, anonymous, in-class activity.

Here is how it works. Near the end of the class, you ask your students to take out a sheet of paper and write down the answer to two questions:

1. What is the most important thing you learned during this class?
2. What is the main unanswered question you leave class with today? What is the 'muddiest' point?"

You will find that this exercise involves more than mere recall. It requires students to evaluate what they recall, while promoting writing skills and/or critical thinking skills. Its main advantage is that it requires very little preparation time, can be read easily and quickly by you, and can be used in all disciplines. More importantly it allows you to know what works and how you can improve on it.

Sources

Pedagogy First, Technology Second
The Do’s and Don’ts of Teaching with Technology
Dr. Aziza Ellozy, Director, Center for Learning and Teaching

The Center for Learning and Teaching at AUC has just launched a pilot program (Student Technology Assistants Program) aimed at helping faculty with matters of instructional technology. If you are new to teaching with technology—or even if you are not—here are some tips that you may find useful.

• Do not incorporate technology for the sake of technology. Focus first on a pedagogical issue and see if technology can help.

• Collaborate and learn from others. A good way of doing this is to visit (and encourage your students to visit) other websites.

• Whenever possible, allow your students to have remote access to learning materials (through a course website, WebCT, internet links, or email).

• Be patient. Using computers as an aid to teaching and learning is an iterative process that requires experimentation and perseverance.

• Use technology to enhance student-centered learning. For example
  - Promote active learning: drill and practice modules with feedback are one example
  - Encourage collaborative learning (some instructors have students proof read each other’s outlines, abstracts or drafts before submission)
  - Provide links to the latest data or literature in your field.

• Use technology to “think out of the box”. Here are some examples from the University of Michigan:
  - David Porter (English and Comparative Literature), has designed and implemented the Eighteenth-Century England website, an ongoing, cooperative project by UM students studying eighteenth-century literature. To view the Eighteenth-Century England website, go to http://www.umich.edu/~ece/
  - Dennis Pollard (Romance Languages and Literatures), uses technology in a variety of ways to teach intermediate Spanish courses. His Spanish webtrips site gives students in Spanish conversation the opportunity to take a virtual tour of Madrid and then do their own online research to create a virtual tour of a Spanish city. Students studying Spanish composition can go to Pollard’s website called The Essay, in which they view a classically structured Spanish-language essay and its corresponding outline; by clicking on individual
sections of the outline, students highlight key sections of the essay and see more detailed comments on the function of the essay’s various parts.

http://www.personal.umich.edu/~dennisdp/CRLT.html.

○ Nancy Kerner, (Chemistry), created CoLABnet, a program whose full name is “collaborative laboratories through networked computers.” Students work in the lab in teams, with each using its own set of samples and/or conditions. Each team funnels its data into the CoLABnet software program, which then collects, pools and summarizes the qualitative and quantitative data and places it into a customized databank. Students can then study, manipulate and analyze the data in a laboratory context that simulates the scientific process.

http://www.umich.edu/~chem125/.
Critical Thinking (1)

Dr. Aziza Ellozy, Director, Center for Learning and Teaching

If there is one feature that distinguishes an AUC education from that of all other institutions in the region, it is that ours is a liberal arts education. As faculty, we recognize that critical thinking figures prominently at the core of a liberal arts education, and that our goal is to change our students from being passive receptors of information to being “critical thinkers”.

It is therefore useful to define for ourselves what critical thinking is, and to explore the reasoning skills that are associated with it. It is also important to examine practical classroom strategies that have been found to promote those skills.

While many definitions of critical thinking abound in the literature, the two simplest ones are:

° “Critical thinking is thinking that assesses itself” (Center for Critical Thinking, 1996)
° Critical thinking is “the ability to think about one’s thinking …to… recognize its strength and weaknesses, and… to recast the thinking in improved form.” (Center for Critical Thinking, 1996)

What specific reasoning abilities should we cultivate in our students?

Physicist Arnold Arons suggests ten of them, summarized as follows. The ability:

1. To consciously raise the questions: What do we know…? How do we know…? What is the evidence for…? when studying some body of material or approaching a problem.

2. To recognize when a conclusion is reached (or a decision made) in the absence of complete information, and to be able to tolerate the ambiguity and uncertainty.

3. To discriminate between observation and inference, between established fact and subsequent conjecture.

4. To recognize the necessity of using only words of prior definition rooted in shared experience, in forming a new definition, and to avoid being misled by technical jargon.

5. To probe for assumptions behind a line of reasoning.

6. To draw inferences from data, observations, or other evidence and to recognize when firm inferences cannot be drawn.

7. To perform hypothetico-deductive reasoning; i.e. given a particular situation, to apply relevant knowledge of principles and constraints and to visualize, in the abstract, the plausible outcomes that might result from changes imposed on the system.
8. To discriminate between inductive and deductive reasoning

9. To test one’s own line of reasoning and conclusions for internal consistency

10. To develop self-consciousness concerning one’s own thinking and reasoning processes.

Having said that, what **classrooms strategies** can be used to develop such skills in our students? Our **next “New Chalk Talk” issue** will address this question.

**Sources:**


Critical Thinking (2)

Critical Thinking Requires Critical Questioning

Dr. Aziza Ellozy, Director, Center for Learning and Teaching

Critical thinking theory has its roots in the works of Benjamin Bloom, a psychologist at the University of Chicago. Bloom (1956) categorized thinking into six processes. Bloom’s Taxonomy, as it is called, is one of the most influential critical thinking models and continues to be as applicable today as it was then.

The six levels, listed in Table I, are in order of increasing levels of reasoning. Ideally, our goal as educators is to move students from the lower levels of thinking to the upper levels, and if it is critical thinking that we are after, then we have to aim for levels 4-6.

One way of doing this is to ask students good questions. (Table 1 matches question types with levels of reasoning). Another way is to teach students to ask good questions (King, 1995).

Table 1. Bloom's Taxonomy of Learning Objectives

<table>
<thead>
<tr>
<th>If questions sound like…</th>
<th>….it is probably this reasoning level</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Explain” “Predict” “Compare” “Summarize” “Interpret” “Give an example” “Contrast”</td>
<td>2. Comprehension (understand meaning of facts and ideas)</td>
</tr>
<tr>
<td>“Calculate” “Solve” “Apply” “Given------. Use this information to…”</td>
<td>3. Application (use information in new situation)</td>
</tr>
<tr>
<td>“Distinguish…” “How does ------ relate to --- ---? “What conclusion can you draw” “How would you classify…?”</td>
<td>4. Analysis (Find evidence to support generalization, see organization, see patterns)</td>
</tr>
<tr>
<td>“Design…” “Construct…” “Develop…” “Can you propose an alternative…?” “Could you predict the outcome if…?”</td>
<td>5. Synthesis (generalize, create new ideas from old sources)</td>
</tr>
<tr>
<td>“Evaluate” “Appraise” “Justify which is better” “Evaluate…..argument based on established facts.”</td>
<td>6. Evaluation (make judgments about validity of ideas, of information based on a set of criteria)</td>
</tr>
</tbody>
</table>
Here are a few thoughts.

Have students generate questions.
° You may ask your students to generate their own questions (*about what they read in their textbooks, hear in lectures, and encounter during class discussions*) for use in review sessions or quizzes.
° Give them Bloom’s taxonomy as a guide, and ask them to label their own level of reasoning. Recognizing and categorizing questions associated with the different levels encourages critical thinking.
° Encourage them to generate high level questions.

Create a classroom climate that encourages thinking.
° When asking questions, allow sufficient time for students to reflect on the questions asked or the problems posed.
° Coach reluctant students with follow-up questions. Your nonverbal message should be encouraging, smiling and not challenging.
° Arrange the seating arrangement so that the students share the stage with the teacher and all can interact with each other. This helps to minimize the passive mode the students adopt when all are facing the teacher.

Encourage Collaborative Learning:
Shared learning gives students an opportunity to engage in discussion and take responsibility for their own learning. Cooper (1995) argues that putting students in group learning situations is the best way to foster critical thinking.

Sources


The New Plagiarism

Dr. Aziza Ellozy, Director, Center for Learning and Teaching

“...ethics, integrity, and honesty are flying out the window on digitized wings” (Howard, 2002)

As a “newcomer” to AUC, I attended this year’s Newcomer’s Orientation program, where plagiarism and cheating were discussed at length in one of the sessions. Although plagiarism is not new, it is apparently on the rise, and is a topic of great concern not only here at AUC, but at institutions of higher learning in the US and the UK among others.

In AUC’s Student Handbook on Academic Honesty, plagiarism is defined as “passing off as one’s own the ideas or words of another” (Webster’s Dictionary). It seems simple and straightforward, but if you were to research the literature, you would find that there is more to plagiarism than meets the eye. The experts say there is “auto-plagiarism, self-plagiarism, substantial plagiarism, incidental plagiarism and”, believe it or not, “unconscious plagiarism or cryptomnesia” (Evans, 2000). Heaven forbid our students should ever hear about this one!

We are therefore advised to judge the severity of the infraction and act accordingly, while recognizing that students do not enter higher education knowing how to paraphrase or to attribute sources correctly. The Writing Program and other courses at AUC educate our students on these issues.

This, however, is not what this issue of “New Chalk Talk” is about. What concerns us is a new type of academic dishonesty dubbed the New Plagiarism, resulting from the ease with which information can be accessed from the Web.

Students can not only cut and paste their way through a complete term paper, they can access entire term papers online; and for a fee, they can order a custom-made term paper that is usually ready within 48 hours. This is a very serious matter that no professor can or should tolerate, and short of becoming a fulltime policeman, how can we respond?

It seems that the most convenient detection methods make use of technology. If it appears that a paper has been plagiarized, you can:

• Try searching for a key sentence with a search engine like www.google.com. This is free of charge but most probably time consuming.

• Use an anti-plagiarism tool. A number of different services (EVE2, “Essay Verification Engine”; Plagiarism.org) are available to help professors identify plagiarized materials. Most of these services charge a fee. It is recommended that you warn students that you will be using such...
a service at the beginning of the semester. This, in itself, may serve as a deterrent to plagiarism before it starts.

One of the most widely used software is Turnitin.com which AUC is seriously looking into licensing. When a suspect paper is submitted, it is compared with a very large database containing over one million papers and two billion Internet pages. At the end of the process an “originality” report is issued with a percentage probability that the paper was plagiarized. It also includes the plagiarized passages with live links to their sources on the Internet.

Most educators argue that the use of such anti-plagiarism tools alone, while effective, is not enough. As we know, plagiarism is only one aspect of the ugly face of academic dishonesty. Many institutions (including AUC) are responding by adopting other approaches as well: some have honor code statements that entering students are required to sign and uphold; others have established academic integrity offices that address pertinent issues. Whatever the means used, the discussion of ethics and the emphasis on academic integrity should be an integral part of our students’ education and will hopefully translate into a lifelong commitment on their part.

Sources
Howard, Rebecca M. Don’t Police Plagiarism: Just TEACH. Education Digest, Volume 67, 5, Jan 2002.

See http://www.turnitin.com/static/index.html
More Thoughts on Plagiarism from a Colleague

Dr. Aziza Ellozy, Director, Center for Learning and Teaching

The subject matter of our last issue, “The New Plagiarism”, generated a lot of feedback from faculty, and is obviously a high priority on many of our colleagues’ minds. Following are excerpts from a memo circulated by Ms. Cynthia Sheikholeslami, an ELI teacher, to her colleagues in the ELI, which she passed on to me. The issues that she raises address another important aspect of the problem, namely our own responsibilities as faculty. Here is what she has to say:

Dear All:

In light of the "New Chalk Talk" issue on Plagiarism distributed to faculty recently, AUC’s initiatives to combat plagiarism, and my experiences this semester with a plagiarized essay in the ELI’s Effective Writing course for graduate students, as well as a plagiarized research paper which had been submitted for another course (as is permitted in the ELI’s Library Research course for graduate students) and accepted as a good paper by the professor, I would like to offer the following thoughts for consideration:

1. We need to give the strongest message possible starting from day one, from the lowest to highest levels in the ELI, that plagiarism is not acceptable.

2. All the materials we distribute in class that are not completely and originally written by us should be CLEARLY and COMPLETELY referenced to the source from which they came, whether photocopied from books or obtained from other published sources (including electronic/online). Right now, many handouts in our files do not have the complete (or any) reference to the source from which they were taken. This gives a message to students that attributing materials to sources is not important...the wrong message! It also shows that we ourselves are massively guilty of plagiarism.

3. Test materials should include the citation for the sources of reading passages. I suppose even a page with sources for mini-talks in the listening tests (and class exercises) should be included.

4. If reading passages are quoted and edited, the conventions for showing editing (with ellipsis, brackets, etc.) of quoted material should be followed. Students will then get accustomed to seeing them in use and it will heighten their awareness of what quoted vs. paraphrased text is.

5. Exercises made by us, which incorporate quoted/paraphrased material (text, tables, diagrams, etc.), should have the sources cited in full.

6. It should be imperative that pages photocopied from books (even when cut and pasted into new formats) include the complete citation to the source on them. This should also apply to materials incorporated in WebCT and other websites, including those obtained from...
electronic sources. **Not doing so is not only clear copyright violation but also plagiarism.**

7. When students are asked to summarize and paraphrase and respond to passages from readings and lectures in class or on tests or for papers, it should be mandatory that they include the reference to the source with their summary or paraphrase or response. We should be aware of what the characteristics of a paraphrase have to be so it does not reflect the language of the original text – just switching the grammatical forms around and using a few synonyms is not considered different enough to avoid plagiarism as the language is still essentially that of the source.

8. Students need to be made aware that their language is not expected to sound like sources written by professionals and native speakers of English, and that their own critical thinking is highly valued. This is especially important for EFL students coming from an educational system where rote memorization and regurgitation are the norm and independent thought is discouraged.

9. I have recently encountered the opinion, which the students claimed was from an AUC instructor, that in a research paper, students should NOT include their own critical thinking on the topic, but ONLY what they get from their research in the library!

10. Documented cases of intentional plagiarism should be grounds for immediate failure and, if repeated, dismissal from AUC, as per the AUC Academic Honesty policy.
Fair Use Guidelines for Educational Multimedia  
*Dr. Aziza Ellozy, Director, Center for Learning and Teaching*

Faculty at AUC are facing questions that many educators in the US and around the world are facing: What guidelines are there for the production of multimedia materials? Under what conditions can we introduce video and audio clips, digitize images and text for educational purposes? How do we take advantage of innovative instructional technologies and changing educational needs without running the risk of violating copyright law?

For material that is protected by US Copyright law of 1976, the following applies: the copyright owner has exclusive rights to reproduce, distribute, make derivative works, and publicly display or perform the work. But this law also puts limitations to these exclusive rights with the *fair use statute*, and this is what educators and scholars look at for guidance. According to this statute, to legally use portions of copyrighted material, we must prove four factors:

1. **Purpose and use**: should be educational in nature.
2. **Nature of the copyrighted work**: courts favor published over non-published work and nonfiction over fiction.
3. **Amount and substantiality**: the copied material must be a portion from the original work and not a substantial amount (pictures are problematic because one does not want to copy only a portion).
4. **Effect of the use upon the potential market for or value of the copyrighted work**: this is more complicated than the other three, and some courts have called it the most important of the four.

Experts have recognized that these “four factors” standards are vague and subjective and have failed to provide effective guidance for educators and scholars. At the Center for Learning and Teaching (CLT), we have already come across situations where fair use was interpreted liberally and others where clarifications were needed.

The question then becomes: has there been an effort to issue clearer guidelines with which educators could work with? The answer is yes, but with qualified results.

A *Conference on Fair Use* ("CONFU") tackled this question in 1994 and two years later, issued “Guidelines for Educational Uses of Digital Works”. Most of these guidelines failed to achieve consensus support among the conference except those for the *Fair Use Guidelines for Educational Multimedia*. These were established by the Congress of the US as a non-legislative report and the full text of these Guidelines can be found at:  
[http://www.libraries.psu.edu/mtss/fairuse/guidelines.html](http://www.libraries.psu.edu/mtss/fairuse/guidelines.html)  
Since this is a new area of concern for our faculty, we will summarize the guidelines here but strongly encourage further examination for more details.

a) **What is an educator’s multimedia production?** The Guidelines provide an explanation. It is the integration of “individual instructional resources with [the educator’s] own original works in a meaningful way, providing compact educational tools that allow great flexibility in teaching and learning. Material is stored so that it may be retrieved in a nonlinear fashion, depending
b) on the needs or interest of learners.” The “instructional resources” mentioned are copyrighted materials such as slides, videos, books, sound recordings etc.

b) *When can the multimedia production be used?*
- For face-to-face instruction
- For remote instruction provided the network access is limited (password protected)
- For students’ directed self-study.

c) *What is the time limitation during which it can be used?* Educators may use them for a period of up to two years after the first instructional use with a class after which permission is required.

d) *What limitations are there on the amount* of copyrighted works that can be used without permission?
- **Motion Media**: Up to 10% or three minutes, whichever is less, of the total amount of a single copyrighted work.
- **Text materials**: Up to 10% or 1000 words, whichever is less, of the total amount of a single copyrighted work.
- **Music, Lyrics and Music Video**: Up to 10%, but in no event more than 30 seconds, of the music and lyrics from an individual musical work.
- **Illustrations and Photographs**: A photograph or illustration may be used in its entirety but no more than 5 images by an artist or photographer may be reproduced or otherwise incorporated.
- **Numerical Data Sets**: Up to 10% or 2500 fields or cell entries, whichever is less, from a copyrighted database or data table.

e) *What are the copying and distribution limitations?* Only a limited number of copies can be distributed under certain conditions.

**Sources:**

“*Fair Use Guidelines for Educational Multimedia Established by Congress of the United States*” (Online) Available at [http://www.libraries.psu.edu/mtss/fairuse/guidelines.html](http://www.libraries.psu.edu/mtss/fairuse/guidelines.html)

The Student Technology Assistants (STA) Program
A Progress Report
Dr. Aziza Ellozy, Director, Center for Learning and Teaching

In a study conducted last year entitled “Computer use by Faculty and Students at the American University in Cairo: An ethnographic approach” (September 2002), the authors, Dr. M. Peterson (Anthropology) and Dr. E. Coker (Psychology) concluded that:

“… most [AUC] faculty express an interest in wanting to learn ICT [Information Communications Technology], but they are concerned about the time it takes. Every non-user mentioned a lack of time to learn the technologies, and a lack of time to perform the implementation. Rather than attending workshops or classes, faculty say they want to learn ICT strategies on their own schedules, at their own pace, and with minimal staff contact time (our emphasis). But when they need the staff, they want them there with the answers or resources immediately.”

Responding to these concerns, and recognizing that there is an untapped pool of student talent and skill on our campus, the Center for Learning and Teaching (CLT) embarked on a pilot “Student Technology Assistants” (STA) program last fall (2002).

The center has hired graduate students and has trained them (with the collaboration of Academic Computing Services), to assist interested faculty members in preparing instructional materials and/or using WebCT (the course management system adopted by AUC). This has involved assisting faculty members, on a one-on-one basis, “at their own pace and on their own schedules”, on how to use and develop these tools in and out of the classroom. In other words, our STAs have made the equivalent of “house calls” to our faculty.

The services offered are in the following areas:
a) WebCT: one-on-one training and uploading of course material (text, images, PPT slides, grades, etc...)
b) One-on-one training and preparation of PowerPoint presentations
c) Scanning of slides and instructional materials

Twenty-seven faculty members participated in the program and were assisted by seven graduate students. The number of participating faculty members and their corresponding departments are shown in Table I where:

HUSS = School of Humanities and Social Sciences
BEC = School of Business, Economics and Communication
S & E = School of Sciences and Engineering
Table I.

Results of survey

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>No opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would not have used WebCT this semester w/o this help</td>
<td>60%</td>
<td>27%</td>
<td>9%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>I feel that I have explored more features of WebCT than I expected</td>
<td>43.5%</td>
<td>52%</td>
<td>4.5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>The assistance I received was very helpful</td>
<td>89%</td>
<td>11%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I found the appointments with my STA convenient</td>
<td>70.5%</td>
<td>29.5%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I would recommend this program to a colleague</td>
<td>81.5%</td>
<td>18.5%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

To the question: “On the whole how would you evaluate this program?” the following are some of the answers given:

- “Excellent” (9)
- “Extremely helpful” to “very useful” or “very good” (7)
- “Highly recommended. My compliments….”
- “Outstanding”
- “5 on a 5 point scale”
- “Much needed. The excellent facilities at the Center make it a real draw. I also appreciate the enthusiasm of all the staff I have dealt w/ at the Center…”
- “Terrific…”
- “Extremely convenient”

Given the high degree of faculty satisfaction, the Center for Learning and Teaching will continue to expand and develop the STA Program. Faculty members interested in finding out more about this semester’s STA program should be on the lookout for our email announcement very soon.
Seven Principles for Good Practice in Undergraduate Education

Dr. Aziza Ellozy, Director, Center for Learning and Teaching

The Seven Principles, as they are called, were first published in 1987, by Arthur Chickering and Zelda Gamson, in a study supported by the American Association for Higher Education (AAHE), the Association of American Colleges (ACE) and the Johnson and Lilly Foundations. These principles were extracted from decades of research on learning in higher education. They were a huge success then, have continued to be refined, and are used in many ways since. Here we are including the condensed version of the principles with the hope that these principles will stimulate discussion and action to enhance student learning.

1. Good practice encourages student-faculty contact.
   Frequent student-faculty contact in and out of classes is the most important factor in student motivation and involvement. Faculty concern helps students get through rough times and keep on working. Knowing a few faculty members well enhances students' intellectual commitment and encourages them to think about their own values and future plans.

2. Good practice encourages cooperation among students.
   Learning is enhanced when it is more like a team effort than a solo race. Good learning, like good work, is collaborative and social, not competitive and isolated. Working with others often increases involvement in learning. Sharing one's own ideas and responding to others' reactions improves thinking and deepens understanding.

   Learning is not a spectator sport. Students do not learn much just sitting in classes listening to teachers, memorizing pre-packaged assignments, and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves.

4. Good practice gives prompt feedback.
   Knowing what you know and don't know focuses learning. Students need appropriate feedback on performance to benefit from courses. In getting started, students need help in assessing existing knowledge and competence. In classes, students need frequent opportunities to perform and receive suggestions for improvement. At various points during college, and at the end, students need chances to reflect on what they have learned, what they still need to know, and how to assess themselves.

5. Good practice emphasizes time on task.
   Time plus energy equals learning. There is no substitute for time on task. Learning to use one's time well is critical for students and professionals alike. Students need help in learning effective time management. Allocating realistic amounts of time means effective learning for students and effective teaching for faculty. How an institution defines time expectations for
students, faculty, administrators, and other professional staff can establish the basis for high performance for all.

6. **Good practice communicates high expectations.**
Expect more and you will get it. High expectations are important for everyone--for the poorly prepared, for those unwilling to exert themselves, and for the bright and well-motivated. Expecting students to perform well becomes a self-fulfilling prophecy when teachers and institutions hold high expectations of them and make extra efforts.

7. **Good practice respects diverse talents and ways of learning.**
There are many roads to learning. People bring different talents and styles of learning to college. Brilliant students in the seminar room may be all thumbs in the lab or art studio. Students rich in hands-on experience may not do so well with theory. Students need the opportunity to show their talents and learn in ways that work for them. Then they can be pushed to learning in ways that do not come so easily.

**Source**
Keyword frequency in CLT’s newsletter over the past 15 years