Learning Technologies: passport to the land of significant learning

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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 reference to 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

Srathclyde 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 reference to 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 a significant resource in order 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/Diagnostic** – 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:
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- Dee Fink, L (2003), **Creating Significant Learning Experiences**, Jossey-Bass.
- Gustafson, Kimberly (2004), *The Impact of Technologies on Learning*, **Planning for Higher Education,** 32 (2)
- Jones, S (2002), *The Internet goes to College: How students are living in the future with today's technology*, Pew Internet and American Life Project, retrieved 23 September 2003, from http://www.pewinternet.org/reports/toc.asp?Report=71

*For further information on different **"digital media"** and how to incorporate them into your teaching at AUC please contact pandeli@aucegypt.edu and/or aellozy@aucegypt.edu*