

NEW CHALK TALK

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 cant 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.