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Sustainable & Effective Integrated Technology in Classrooms

Leaders and Laggards describe how "educational innovation means discarding policies and practices that no longer serve students while creating opportunities for smart, entrepreneurial problem-solvers to help children learn" (qtd. In Blueprint). This description of Education Innovation relates well with the idea of integrating technology in education. However, this integration process is a complex one that must be carefully done and well researched in order for education process to benefit and develop. The most important point that educational administration has to focus on is how to construct a sustainable practical integration of technology in education to eliminate the drawbacks of traditional teaching without losing its essential good qualities. This essay will discuss possible solutions to this issue and present current applications.

The first and simplest solution that has already been applied is the creation of Hybrid classes. These are classes that students attend physically and teachers use technology while explaining and teaching. This is a good integration as teacher-student interaction is the most important aspect in the several types of learning: direct learning, student centered learning and knowledge creation (Blueprint). Each of these learning types are needed in different situations and subjects and every type can be the best method to use. Traditionally, students in some situations can benefit more from doing research on their own and learn independently about the subject — student centered learning — than to be sitting passively listening to the

teacher's explanation — direct learning. In other times, it can be even more beneficial that the student creates knowledge himself and does something original. All these learning types are provided in a Hybrid class where the presence of the teacher and the use of technology present a variety of teaching methods. However, the problem with the Hybrid class is that it is left to the teacher's sense to decide which method to use to reach maximum effectiveness. This means that teachers must be creative, enthusiastic enough and always up-to-date with technological advances. They must be at least as efficient as their students in using technology so that the feeling of respect towards the teacher will be preserved.

Accordingly, in order to conduct more successful Hybrid classes, teachers must be trained to “receive strong, meaningful and sustained professional developments and support” (Blueprint) . That was a finding along with many others of Dr. David Silvernail, director of research for the Maine International Center for Digital Learning at the University of Southern Maine, in response to a research done in three US states to determine what is needed for education to be innovative (Blueprint). This shows how extremely important research is to find out more about what is needed and what can be done. At the American University in Cairo where I attend, there is a program called “The Professional Educator Diploma in Integrated Technology for Classroom Teachers (ETCT)”. In this program teachers learn how to implement features of technological advances to be useful for their curriculum , how to use technology in the assessment and evaluation of students and to practically apply this in a project (“Integrated”). These training programs, however, are not provided in other public universities in Egypt. Therefore, Hybrid classes are not sufficiently applied at most of these universities. I, personally, attended several lectures at the Faculty of Medicine at Alexandria University and the teachers did not use any technological methods while explaining. Teachers are not trained to use technology and the institution itself may not be able to afford providing technological devices or are not aware of their importance. Training teachers to use technology in class is one of the major aspects that

might develop the education process in Egypt.

Beside training teachers and research, a yearly student evaluation of the technology used by Each of their professors, how effective it was and whether they feel it added to their understanding or not and what suggestions they might have to enhance technology usage in class must be done. As effective and important as it is to evaluate teacher's academic performance in class to ensure high quality education, students' evaluation of the teacher's skills to use technology is also important. Listening to the students' technological needs will help educators to choose the best teaching method. At AUC all students must fill an evaluation form on professors every semester and among the questions there is one question about how we-students-feel about the professor's usage of technology in class. However, there is no separate form to evaluate applied technology alone. There is no much space for the student to give his suggestions and to state his technological needs. In other public universities there is not even an evaluation form for professors and therefore no evaluation for technology usage in class. Distributing or posting an evaluation form online is definitely not expensive and not time consuming. It only needs an enthusiastic and caring administration to apply this as "many academics seem reluctant to embrace technology" (Rienties, Brouwer, and Bakera).

Another way to ensure practical technology integration in classes is to try to eliminate time and money consuming unnecessary technological devices or methods. For instance, Duke University Business Professor Aaron Chatterji says that there is no great evidence that suggests smartboards on which they have spent a fortune, are "making a difference" or adding to the education process (Beckham). So, it does not make sense to spend a lot of time on training teachers to use meaningless technology and spend a lot of money which can be invested in a development of another kind.

After realizing all these solutions and after doing research, policies must be set to standardize the use of technology in education internationally. Every classroom should have a

minimum requirement of technological devices and methods used as well as a maximum. This would further oblige teachers and universities to care about technology and to give it its deserved attention. Universities will not be accredited, e.g., if they do not meet these criteria and teachers will not be qualified. As 45 states and the District of Columbia are “subscribing to Common Core State Standards, technology vendors may now have a more unified vision of what educators need - and a simplified production model” (Beckham). If states can unite upon what the curriculum should be like, they can also decide to unite upon how technology will be integrated into education. At AUC, the training program made for teachers is “based on the National Educational Technology Standards-Teachers (NETS-T) as well as the International Technology Education Association (ITEA) standards” (“Integrated”). This means the standard is already determined and only the application is left. Working according to an international Standard on the degree of technology usage is a long term solution along with the others that would make a clearer vision.

It is widely acknowledged that “the use of technology in education is one of the major trends in educational reforms all over the world” (Laxford). Creating a Hybrid classroom where a variety of teaching options is provided, giving teachers trainings to help them develop their technological skills which will then be evaluated by the students , doing more research, and standardizing the usage of technology internationally are solutions that should be given a thought by educational administrations when wanting and deciding to innovate education.

Works Cited

Blueprint, K12 Computing. *Brief: What We're Learning from Technology-Transformed Schools*.

ProjectRED, 1-30. eBook.

Beckham, Kate. "Metrics, Standardization Needed for Classroom Technology

Progress." *Faronics*. N.p., 12 Feb 2013. Web. 8 May. 2013.

"Integrated Technology for Classroom Teachers (ETCT)." *The American University in Cairo*.

Web. N.p.. 17 May 2013.

Laxford W., Kajuna. "Implementation of Technology Integration in Higher Education".

OhioLINK ETD Center, n.d. Web. 17 May 2013.

Rienties, Bart, Natasa Brouwer, and Simon Bakera. "The Effects of Online Professional

Development on Higher Education Teachers." *ElSevier*. 29. (2013) Web. 17 May 2013.