Professional Reflections on "The Impacts of Technology in Learning"

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It is widely observed that incorporating technology in learning creates a shift in learning styles. Flexibility, mobility, accessibility and tempo are the aforementioned advantages of utilizing technology in learning. However, researchers sparked debates of doubt on the benefits from the merge of technology and education and that has been postulating theories as to its effectivity or success factor in imparting knowledge to learners. Kershaw (1996) stipulates that students' willingness to learn depends on their *level of interaction* with their instructors, therefore, rendering blended or online learning not conducive to learning. Independent learners are also highlighted in this assumption being the ones who will succeed best with this type of learning environment (Cooper, 1999). Cooper (1999) further notes that virtual interaction would not be able to replicate nor surpass the effectivity of an instructor-student relationship.

e-Learning is also proposed to be highly beneficial to students who are being "spoon fed" in their learnings (Knight, 1996) and to be able to get the benefit of e-Learning, students must be mature enough to take responsibility on their learning (Hawkes, M. & Cambre, M., 2000). Opposing this, Michailidou and Economides (2003) stipulates that "the development of a virtual world motivates students to participate in the educational process by exploring and playing with the lesson material." This provides active, student-centered and independent learners enabling communications between the instructor-student and student-student to be more engaged than that of a traditional class. The success of learning using technology is also affected by its technological setup. Hi-speed Internet, super computers, and the emergence of virtual reality devices which ensures a full immersive learning environment creating a high knowledge retention (Volery, T. & Lord, D., 2000).

Advantage or a disadvantage, institutions utilizing technology in their learning methodology must take into consideration the different perceptions or level of understanding of the different types of learners. Institutions who use online, blended or web-facilitated learning's challenge is to devise a program wherein it encompasses these different learning styles or risk failing to deliver knowledge to their students.

The developments in technology have created the *paradigm shift in education* and bring forth undeniable impacts to how we perceive learning in this digital age. Educational institutions have been integrating technology in their learning methodology to cope up not only to the changing learning styles of the evolving generation of learners but also to keep up with the needs of knowledge-based societies world-wide. The occurrence of virtual learning environment's success has been challenged by the academe in terms of challenging its effectivity in the modern day learning styles, specifically affecting adult learners. However, the younger generation experiencing this digital transition is expected to have a smooth transition. Educational institutions providing *virtual classroom experiences* are encouraged to

develop inclusive programs that cater to all learning styles and all learner types, and failure to do so poses a risk in low knowledge retention or worse, leading students to seek a different education provider.

Thailand has been one of many Asian countries that have adapted technology in education not only the access to the Internet or utilization of technology as teaching and learning tool but also implementing an entire learning structure—online learning. The Thai government has recognized this progression and has started developing and implementing efforts in carrying out technology to improve education in Thailand. The emergence of online learning in higher education institutions worldwide has prompted a demand in Thailand to adapt and execute it in its educational offerings; however, there is still a small number of institutions that fully grants online degrees. As known, only one (i.e., Assumption University) out of the top ten universities in Thailand is offering them. This may have contributed to Thailand's e-Learning readiness ranking dropping from 36th in the world in 2003 to 49th in 2008, 2009 and 2010.

In conclusion, continuous adaptation or development of education is a must not only for learners but also for the society. The Thai government has made its efforts in investing on ICT in improving Thai education in both teaching and learning. While technology might seem to be difficult to learn, costing too much investment, and difficult to keep up as it constantly changes (i.e., hardware, software), technology is indeed an aid in enhancing students' learning experience. In order to increase or promote technology in education, the following are encouraged:

Recommendations for institutions / instructors, administrators, lecturers

- Be up to date with the latest technological trends in education
- Have solid foundation of technology for its proper implementation
- Upskill on the latest technological trends on education
- Increase access to online learning opportunities and quality contents

Recommendations for the Thai government

- Widen or increase accessibility of students to equipment
- Continuously upgrade the systems in place (i.e., upgrade the internet accessibility of schools)

Technology provides ample resources to learners and new opportunities. Its integration into learning has provided an essential tool for learners at large in today's education.

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Feedback: We value your feedback and welcome any comments or questions you may have concerning this topic. Please email Pannarat Wansavatkul at pannarat.k@rsu.ac.th.

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