

EFFECTIVENESS OF LEARNING COMPETENCIES WITH TECHNOLOGY

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ABSTRACT

Technology can actually be a most important tool, both in terms of pedagogical resources and in terms of linking with the younger generations. But how does this work? The use of technology for educational or instructional purposes include: Active engagement with the learning material, Use of real-world issues, Simulation and modeling, Discussion and debate boards and forums, Working groups, Formative assessment. Technology in the classroom is like a project into modern invention and you get to be the team leader. Rather than screening digital devices and Internet spaces as a threat to your duties, view them as unfamiliar areas of growth for both you and the young minds trusting you to show them what's out there.

KEYWORDS: Learning Competencies, Educational Technology

INTRODUCTION

Educational technology is transforming education today, and it will continue to do so tomorrow. It is uses of digital mediums to enhance teaching and learning in the classroom and in online environments.

- Educational technology is the use of both physical hardware and educational theoretic
- Educational technology as technological tools and media, for instance massive online courses, that assists in the communication of knowledge, and its development and exchange.
- Educational technology for learning management system.
- Educational technology as back-office management for data storage and analysis. Educational technology itself as an educational subject.

Technology can be a reliable tool for transforming learning. It can help insist and progress relationships between educators and students. This is due to the potentiality of technology to provide a proactive, easy access and comprehensive teaching and learning environment. Nowadays, Ministry of education in all over the world has provided a lot of facilities and training in order to enhance the use of sophisticated technologies for teaching and learning to process.

Technology-based teaching and learning to process that closely related to the utilization of learning technologies in schools. Students are familiar with technology, and they will learn better within technology-based *environment*. Technology element and components lead to effective learning it is right to say that almost all ranges of subjects' starts from mathematics, science, languages, arts and humanistic and other major fields can be learned more successfully through technology-based tools and equipment. Technology provides the help and balancing supports for both teachers and students where it involves effective learning.

Tools can be used in different ways where it helps both teachers and students to learn about their respective subject areas. A technology- based teaching and learning offers various attention-grabbing ways which includes educational videos, stimulation, and storage of data, the usage of databases, mind-mapping etc. On the other hand, students will do good to from technology where they are not restricted to the limited curriculum and resources, as a substitute hands-on activities in a technology-based course is designed to help them to prompt their understanding about the subject. It also helps teachers to design their lesson plans in an effective, creative and interesting approach that would result in students' dynamic learning.

Competency-based learning through technology is an approach to education that focuses on the student's demonstration of preferred learning outcomes as essential to the learning process. A key feature of competency-based learning is its focus on outcomes. In other learning models, students are uncovered to content—whether skills or concepts—over time, and success is calculated collectively. In a competency-based learning system, students are not allowable to continue until they have demonstrated effect of the identified competencies. So it is outcomes-based learning in this case outcomes, called 'competencies'—are acknowledged previously, and students are frequently assessed.

OBJECTIVES OF THE STUDY

- 1) To study the schools with dynamic and innovative learning environments for students to become more motivated and creative.
- 2) To enable students to expand wider range of knowledge and be able to access to internet for developing a global outlook.
- 3) To cultivate students with learning capabilities of processing information more effectively and efficiently.
- 4) To develop students with learning attitudes and learning capability of life-long learning.

HYPOTHESIS OF THE STUDY

1. Students will be more dynamic and self- motivated to learning.
2. Students will be more knowledgeable towards global outlook.
3. Students will be nurture more learning capabilities and efficiently.
4. Learners will be always ready to lifelong learning.

SAMPLE OF THE STUDY

The overall total of respondents for this research was 101 students from public primary and secondary schools in greater Noida.

RESEARCH METHOD

Normative observation

Tool for Data Collection

Self made question paper and observation used.

Table1. Effectiveness of Technology for student's learning

NO	ITEMS	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE	MEAN	S.D
		FREQUENCY AND PERCENTAGE					
1	Technology allows students to be more creative and imaginative.	1 (1%)	7 (6.9%)	64 (63%)	29 (28.7%)	1.80	0.60
2	The use of technology helps students to find related knowledge and information for learning.	1 (1%)	4 (4%)	61 (60.4%)	35 (34.7%)	1.71	0.59
3	The use of technology encourages student's confidence to participate more with their classmates.	11 (10.9%)	0	63 (62.4%)	27 (26.7%)	1.84	0.60
4	The use of technology promotes active and engaging lesson for student's best learning to experience.	1 (1%)	6 (5.9%)	53 (52.5%)	41 (40.6%)	1.67	0.63
5	The use of technology enables students to express their ideas and thoughts better	3 (3%)	13 (12.9)	47 (46.5%)	38 (37.6%)	1.81	0.77
6	Students learn more effectively with the use of technology.						
7	The use of technology increase student's confidence to participate actively in the class.	10 (10.9%)	0	65 (64.4%)	26 (25.7%)	1.84	0.58

The result shows that the efficiency of Technology for students in learning are it encourages students to commune more with their classmates as well as it enhance the student's confidence to involve yourself actively in the class with shared mean of 1.84. It is effective in a sense that students are occupied with sufficient knowledge that enables them to be more confident in sharing and exchanging their opinion with their classmates. Lastly, it shows that students are more behaved and under control with the use of technology in learning but it is also painstaking as fewer acceptances by teachers as the score mean is the highest of all with 1.88. This might give the ideas to teachers that students are a little out of control when technology is used in teaching as teachers are not the focus of learning to process.

STUDENTS SELF DEVELOPMENT COMPETENCIES LEVEL IN DIFFERENT DEVELOPMENT LEVEL TEACHERS OBSERVATION

Analysis of information acquired from the diary of teachers and students:

Researcher analyzed these diaries and concluded that every teacher involve to make a plan about the activities of each child every day. This diary contains the learning information of every child, means achieve, completing and planning of activities by each child. Learning level of each child can get through using this diary. By analyzing of students learning diary it is found that learning level is normal.

SELF DEVELOPMENT COMPETENCY SCALE

	SELF DEVELOPMENT RELATED COMPETENCIES	DEVELOPMENT LEVEL				
		LOWER MINIMUM	MINIMUM	NORMAL GENERAL	HIGHER	EXTREME HIGHER
1.	SELF CONFIDENCE	-	15 %	65 %	10 %	10 %
2.	TAKE SELF DECISION	-	20 %	10 %	10 %	10 %
3.	EXPRESS THE VIEWS CLEARLY	-	10 %	70 %	15 %	05 %
4.	ACCEPT THE RESPONSIBILITIES	-	10 %	10 %	10 %	10 %
5.	APPRECIATE THE GOOD THOUGHTS AND THINGS	-	15 %	60 %	20 %	05 %
6.	WORK WITH CO-OPERATION	-	15 %	25 %	50 %	10 %
7.	SHOW THE EXCITEMENT FOR NEW THINGS AND SITUATION	-	10 %	40 %	40 %	10 %
8.	SENSITIVITY FOR THE FRIENDS	-	10 %	40 %	40 %	10 %
9.	DEVELOP THE PASSIONS AND MEDITATION	-	-	75 %	20 %	05 %
10	FEEL THE HAPPINESS TO THE LEARNING	-	-	85 %	05 %	10 %
11		-	10 %	60 %	20 %	10 %
12	QUALITY OF ADJUSTMENT	-	10 %	65 %	15 %	10 %
13	WORK WITH SYSTEMATICALLY	-	05 %	80 %	10 %	05 %
14	DO THE WORK ON TIME	-	10 %	65 %	15 %	10 %
15	ABILITY OF SELF EVALUATION	-	10 %	70 %	10 %	10 %
16	INTEREST IN SELF STUDY	-	15 %	60 %	15 %	10 %
17	LOVE FOR THE HAND MADE THINGS	-	10 %	65 %	15 %	10 %

Discussion and Conclusion

The results of this study show that technology-based teaching and learning is more effective in compare to traditional classroom. This is because, using Technology tools and equipment will prepare an active learning environment that is more interesting and effective for both teachers and students. The results are in line with a research findings by Macho (2005) that proved use of technology in education would enhance students' learning. However, most of the teachers in this study agree that technology helps to improve classroom management as students are well-behaved and more focused. Students learn more effectively with the use of technology as lesson designed are more engaging and interesting. Accordingly, the participants agreed that integrating technology can foster students' learning. Students can develop the confidence to have better communication and able to express their thoughts and ideas; technology helps students to be more creative and imaginative as their knowledge paradigm expend; and technology helps students to possess all four skills in learning when they are able to acquire necessary information and knowledge. The findings of this study is that the student of public school they are increasing and enhancing learning competencies with the help of technology. They are enjoying learning and having interest to subjects.

^ Lombardi, Patrizia; Giordano, Silvia; Farouh, Hend; Yousef, Wael (June 2012). "Modelling the smart city performance". *Innovation: The European Journal of Social Science Research*. 25 (2): 137–149. doi:10.1080/13511610.2012.660325.

^ Molenda, M. (2008). "Historical foundations". In M. J. Spector, M. D. Merrill, J. Merrienboer, & M. P. Driscoll (Eds.), *Handbook of Research on Educational Communications and Technology* (Third., pp. 3–20). New York, NY: Lawrence Earlbaum Associates.

Chan, F. M. (2002). ICT in Malaysian schools: policy and strategies. Paper presented at a workshop on the promotion of ICT in education to narrow the digital divide, 15–22 October. Tokyo Japan.

Chapelle, C. (2011). *Computer applications in second language acquisition: Foundations for teaching, testing and research*. Cambridge: Cambridge University Press.

Chien, S.P., Wu, H.K., & Hsu, Y.S. (2014). An investigation of teachers' beliefs and their use of technology based assessments. *Computers in Human Behavior*, 31, 198-210.

Cox, M. J., & Marshall, G. (2007). Effects of ICT: Do we know what we should know? *Education and information technologies*, 12(2), 59-70.

