

Effectiveness of Computer Technology in Education System

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Abstract

Integration of Information, Communication, and Technology (ICT) will help preceptors to the global demand to replace traditional tutoring styles with a technology- grounded tutoring and literacy tools and installations. In Malaysia, ICT is considered as one of the main rudiments in transubstantiating the country to the unborn development. The Ministry of Education, through the rearmost Education Blue print(2013- 2025), perceptivity the significance of technology- grounded tutoring and literacy into the seminaries ' public class. This study aims to dissect preceptors ' comprehensions on effectiveness of ICT integration to support tutoring and literacy process in classroom. A check questionnaire was distributed aimlessly to the aggregate of 101 preceptors from 10 public secondary seminaries in Kuala Lumpur, Malaysia. The data for this quantitative exploration were anatomized for both descriptive and deducible statistic using SPSS (interpretation 21) software. The results indicate that ICT integration has a great effectiveness for both preceptors and the scholars. Findings indicate that preceptors ' well- equipped medication with ICT tools and installations is one the main factors in success of technology- grounded tutoring and literacy.. It was also set up that professional development training programs for preceptors also played a crucial part in enhancing scholars ' quality literacy. For the unborn studies, there's a need for consideration of other aspects of ICT integration especially from operation point of view in regard to strategic planning and policy timber.

Introduction

In this 21st century, the term "technology" is an important issue in numerous fields including education. This is because technology has come the knowledge transfer trace in utmost countries. Technology integration currently has gone through inventions and converted our societies that has completely changed the way people suppose, work and live (Grabe, 2007). As part of this, seminaries and other educational institutions which are supposed to prepare scholars to live in " a knowledge society " need to consider ICT integration in their class(Ghavifekr, Afshari & Amla Salleh, 2012).

Integration of Information, Communication, and Technology(ICT) in education refers to the use of computer- grounded communication that incorporates into diurnal classroom educational process. In confluence with preparing scholars for the current digital period, preceptors are seen as the crucial players in using ICT in their diurnal classrooms. This is due to the capability of ICT in furnishing dynamic and visionary tutoring- literacy terrain (Arnseth & Hatlevik, 2012). While, the end of ICT integration is to ameliorate and increase the quality, availability and cost- effectiveness of the delivery of instruction to scholars, it also refers to benefits from networking the literacy communities to face the challenges of current globalization (Albirini, 2006,p. 6). Process of relinquishment of ICT

isn't a single step, but it's ongoing and nonstop way that completely support tutoring and literacy and information coffers (Young, 2003).

Preceptors' Belief on Technology- grounded Teaching and Learning

With the development of learning technologies in the late 20th century, education system has changed fleetly. This is due to the capability of technology to give a visionary, easy access and comprehensive tutoring and literacy terrain. currently, Ministry of education in all over the world has give a lot of installations and training in order to enhance the use of advanced technologies in the countries ' tutoring and literacy process. A high budget has been placed in order to give the outfit demanded by preceptors to ameliorate the education system. Despite all the sweats, utmost of the countries are facing analogous problem whereby the preceptors aren't maximizing the operation of the technology handed(Albirini, 2006). This has come a serious matter as numerous former inquiries have proven the operation of ICT in tutoring and literacy process could ameliorate scholars ' achievement(Nakayima, 2011, Jamieson- Proctor etal., 2013).

The Abstract Framework

For the purpose of this study in light of ICT integration to enhance a quality tutoring and literacy experience in seminaries, two propositions of Diffusion of inventions by Rogers(2003) and Technology Acceptance Model(TAM) by Davis(2003), has been linked and acclimated to the exploration setting as the abstract frame for this exploration(Figure 1). Rogers's proposition stated as the process by which an invention is communicated through certain channels and over time among the members of a social system. The process will starts with "knowledge" of the first channel that represents characteristics of the decision making unit by the ICT druggies in order to integrate the technology. And it ends with "evidence" by the druggies to accept the technology and integrate it consequently. The TAM proposition comprises of colorful corridor which is representing the process of ICT acceptance by the druggies including; behavioral intension, perceived utility and perceived ease of use. While, perceived utility refers to the degree to which person believes on the benefit from the use of a particular technology by perfecting the job performance, perceived ease of use refers to the significance of a technology in being stoner-friendly for the druggies. Generally, TAM proposition was developed to measure the effectiveness or success of a technology in helping understanding the value and efficacy of a particular system. It's also considered as one of the most influential propositions in contemporary information systems exploration. Still, the proposition has evolved with further specific variables explaining how a stoner can accept a technology over the times.

Teachers' Perception on Technology-based Teaching and Learning

The familiarity and skill of the teacher in managing ICT is also found in the data where the definition of 1.81 shows that most teachers feel confident in learning new computer skills and are able to use ICT to access teaching materials and resources. In this context, it shows that teachers are open to the use of ICT in teaching, are not sensitive and feel free to learn new things. Besides, teachers believe that it is easier to teach using ICT with 1.93 points but at the same time, they still believe in the

traditional teaching method where teachers are the learning environment and say they can still teach effectively without using ICT with a recorded 2.04 definition.

Technology-Based Teaching Performance and Student Learning

The use of ICT also helps to expand the student's knowledge paradigm by an average of 1.69 points where students are able to integrate their prior knowledge into current learning programs and share and exchange ideas with teachers and classmates. ICT helps to provide current and current challenges that students can easily access and integrate into their learning process.

Testing for Reliability

Cronbach's Alpha reliability test is used to check the internal consistency of the instrument and its components (see Table 5). It is also considered a measure of reliability of the scale. In this study, the scales used by Likert's scale range from 4 = strongly disagree, 3 = strongly disagree, 2 = strongly agree and 1 = strongly agree. According to Kline (1999), the most commonly accepted value of the alpha value is greater than 0.7 and the alpha value greater than 0.6 is acceptable. In this study, the reliability test was performed appropriately with a category that included section B, C and D of the questionnaire.

Hypothesis Testing

In this study, the Mann-Whitney U Test is used to test the hypothesis developed by the researcher (see Table 8). The test is used to compare the differences between two independent groups towards one dependent variable. Mann-Whitney U Test is used as an inferential analysis by the researcher to test the null hypothesis created by the researcher. Mann-Whitney U Test is used for comparing the efficacy of two treatments in clinical trials where it often presented as an alternative to a t-test when the data are not normally distributed (Hart, 2001).

H01 - There is no significance difference between teachers' perception of ICT in teaching with the type of school (Primary & Secondary)

Discussion and Conclusion

The results of this study show that technology-based teaching and learning are more effective compared to the traditional classroom. This is because, the use of ICT tools and resources will provide an effective and efficient learning environment for both teachers and students. The results are consistent with the results of Macho's (2005) research which confirmed that the use of ICT in education could improve student learning. However, most of the teachers in this study agree that ICT helps to improve classroom management as students are well behaved and very focused. In addition, this study has proven that students learn effectively through ICT as the designed study is inclusive and interesting. Similarly, participants agreed that integrating ICT could promote student learning.

Recommendations

It is highly recommended that comparative studies on the integration of ICT in teaching and learning be conducted between public and private schools. This is because many private schools allow students to bring gadgets to school and the teaching and learning process takes place within the use of ICT. It would be interesting to see the findings between the success of ICT integration in public and private schools.

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