Does Computer Assisted Learning
Impact Student Learning

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Introduction

The field of Information and Communications Technology has presented a wide spectrum of tools which can be used by teachers to integrate within their job and enhance course management, lesson planning, curriculum design, as well as other learning materials. At the same time, technology assisted learning involves the integration of ICT in order to support learning activity, improve the overall learning experience, and enhance the outcomes of learning. These learning activities typically follow some pedagogical approaches that are based on the design of the curriculum. Through the years, advancements in the field of technology has further introduced significant impact and changes in the aspect of education across different levels. For example, in the UK alone, bodies of the Government have heavily invested in different ICT education resources (Hall, 2012). The goal was to modernize the learnings at school, while improving performance and skills of the learners. Different investigations have also been performed in order to determine the overall impact of these computer assisted learning on the performance of the students. However, most of these studies are only focused on the primary students and key stages. This means that there are limited investigations performance regarding the influence of ICT on computer assisted learning at Higher Education.

Literature Review

Previous studies reported by Smith (2014) explains that there is profound evidence that the field of ICT can further help students in learning further, while helping their instructors in improving the overall design of their curriculum, learning materials design, course management and lesson planning. However, Smith also stated that there have been no profound evidence that using computer assisted learning enhances learning. As a matter of fact, other forms of these techniques in learning, including group discussions and peer reviews enhance learning at a much higher rate. Marco (2013) also indicated that metacognitive approaches and thinking skills had better and much bigger impact on the rate of learning among students.

On the other hand, Smith (2014) also reported that the feedback given by computers enhance the performance of students. The 'assessors' of computers for the key skills tests have presented a greater success compared to standard paper-based test. Voice input, text-to-speech feedback and text feedback have also proven to enhance the students' communication skills at their early stages of development, particularly those who are learners of ESOL. It was also discovered that it is highly imperative that computer applications matched the attainment of students even though feedback coming from computers does not help them in improving learning. ICT tools are also found to assist learners in manipulating complicated data sets, visualizing ideas, and developing an overall conceptual understanding. Studies in the field have further shown that skills should not be taught in an isolated way. For example, Multimedia presentation enhance phonological skills and awareness but may fail on the aspect of word recognition. At the same time, some educators compared ICT tools integration as an effective method in improving skills in computer games (Stewart, 2013).

As class settings and smaller group discussions are a proven technique in learning, Smith also argued that the instructors should teach their students the right way to use the different ICT tools so as to effectively communicate and interact with one another. However, it was still reported that there has been little evidence regarding the use of ICT in group discussions.

Conclusion

A review of the various investigations performed regarding the implementation of computer assisted learning is discussed in this research. It has been observed that the use of ICT does not create a huge impact regarding the learners' learning experience, even though it offers a huge amount of benefits to the educators. On the other hand, it has been viewed that the implementation of ICT in Higher Education will create a different impact on the overall learning result because of the independent and autonomous nature of studying at this particular level. Even though there are some combined feedback regarding computer assisted learners, ICT is a technology that is set to stay, and will never be eliminated from the currently existing processes. As a matter of fact, the guidelines and objectives need to be more focused towards the negation of drawbacks of this computer assisted learning. In this PhD research, action points set will be created from the observations of the lessons, performance and feedback tests. It is also expected that the action points may be of help in improving the performance of the learners in Higher Education. On top of that, they may also be viewed as applicable at lower levels including Key Stages in order to gauge the impact.

References

1. Hall, Y. (2012). ICT for Learning, Creativity and Innovation. Prospective Technology Journal, 23(2), 21-23.
2. Marco, T.R. (2013). Creating a difference in learning with technology. Accessed on September 7, 2017 from https://publications.technology.org/display/ICT.html
3. Smith, H. (2014). ICT and Student Learning. Instructional Media Journal, 31(3) 303-307.
4. Stewart, W. (2013). Impact of implementing thinking skills on computer assisted learning. ICT Journal Quarterly, 34(4), 34-35.