The Impact of ICT on Schools

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Abstract: The research paper discussed ICT impact on schools, through discussing its impact on teachers and students, and their general attitudes towards use of ICT in their classroom and as a medium of teaching and learning. The majority of the research indicated that the use of ICT was fruitful; its implementation raised the motivation of the students towards learning through breaking the conventional methods of teaching. Moreover, some of the studies showed that the student's rates of success, and that their participation improved, in addition to advancement in their computer skills and most importantly, their achievement. The use of ICT in schools is challenging and requires careful planning since the new generations have advanced skills in most of the new technological innovations, which threatens the educational process through using the ICT provided at schools for purposes beyond learning and teaching.

Keywords: dynamic; independent learning communication skills implementation and monitoring.

I. Introduction

The extensive use of Communication and Information Technologies (ICT) influence all fields in life, one of which is education. Countries see ICT as potential tools for change and innovation in education. [6] The traditional educational process was limited to three elements, the students, the teachers, and the educational material, but when technology was introduced to the educational process, it became the fourth corner stone of it, leaving an observable impact on the present and future of the teaching-learning process, that require constant update of the teaching methods.

Both developed and developing countries adopted ICT funds in agreement with their policies with the aim of raising the quality in education, to grant work power, and to instruct persons who have aptitude on ICT. One of the factors that verify the educational development in general is teachers because they are the ones to utilize the ICT funds for educational growth. Technology does not have an instructive importance in itself, but grants it when teachers use it in learning-teaching process. Although there are some who argue that the existence of technology in the classroom creates weight on all the educational inputs and requires efficient use [6].

Information and communication technology (ICT) is an influential instrument for the expansion of teaching and learning excellence; it is a medium for fundamental change in offered school practices and an absolute medium for setting up the students for the future. Success in the execution of an ICT strategy is going to be reliant on the appreciation of the significance of its application to education and sustainable execution. The implementation of ICT and taking its ultimate potentials must involve quality of ICT policy, larger participation of private and public sectors in the funding of the execution, and appropriate implementation and monitoring. [8]

II. The Attitude And Impact of ICT Use on Schools

According to Smeets many teachers apply several elements of powerful learning environments in their classes. This especially goes for the presentation of genuine responsibilities and the encouragement of dynamic and independent learning. Yet, the methods used by the teachers to adjust teaching to the needs and abilities of individual students provide quite limited evidence. The use of ICT simply showed uniqueness of the conventional approaches of learning. The probability of using ICT applications, that are supposed to add to the power of learning environments, were superior with teachers who shaped powerful learning environments for their students, and when there were more computers accessible to the students. Besides, teachers' opinions regarding the contribution of ICT to dynamic and independent learning, teachers' skills using ICT, and the teacher's gender appeared to be related to ICT usage. [5]

The great message is that the majority of students and teachers have found the introduction of ICT into the classroom a positive progress, encouraging students and teachers equally and changing thoroughly the learning and teaching experiences of both. There has been a shift in the opinions of teachers and apprehension being steadily replaced by hopefulness and assurance. [2]

The technological resources for using ICT at school are great. Overall, students are able and provoked users of new technology; such skills and attitudes are derived from home resources and free time time use. Students have the skills to use new kinds of applications and new forms of technology, and their ICT skills are broad, even though not sufficient; the working habits might be futile. Some students have a particular kind of

ICT adaptive skills which develops in a valuable communication between school direction and challenges, and interest and activity. [3]

At the moment, ICT continues to make a burden on many teachers who are less common with many of the technologies than are their students. Both of these developments will take time, strategic planning and the sensible use of resources to convey the preferred level of confidence. [2]

III. Teachers' Attitudes

Tazci found that the frequently used and recognized ICT kinds among teachers are the Internet, e-mail and word processing, and teachers' attitudes towards computers and the Internet are commonly encouraging but it varies according to their years of experience and levels of knowledge.

The outcomes of Wastiau et al strongly support the idea that the goal of increasing students' and teachers' ICT use for Teaching and Learning during lessons can be reached through other types of action at whole-school level. Increasing the number of digitally supportive schools is then a complementary objective to be set in several countries, and urgently so in countries with very low percentages of such schools. Depending on the extent of self-government given to schools, national, regional and local policy makers and school heads prominently in decentralized systems do fine to identify and implement policies on ICT incorporation in teaching and learning as well as in subjects, implement motivation to recompense teaching employees using ICT, set up a transform administration plan, and offer day by day sustenance in the classroom credit to the available ICT controllers. [7]

The results from 929 teachers across all year levels and from 38 Queensland state schools performed by Jamieson-Proctor et al. point to that female teachers (73%) of the full time teachers in Queensland state schools in are significantly less confident than their male counterparts in using ICT with students for teaching and learning, and there is evidence of significant resistance to using ICT to align curriculum with new times and new technologies. This result supports the hypothesis that current initiatives with ICT are having uneven and less than the desired results system wide. These results require further urgent investigation in order to address the factors that currently constrain the use of ICT for teaching and learning. [4]

Another research paper indicated that only teachers who apply a student-oriented, constructivist teaching method are likely to use new technology in their classrooms. The lack of sufficient time was found as a vital factor affecting the use of new media in classrooms, suggesting that teachers are not able to totally use new technology while they lack the time required for suitable teaching material using the new media.[8]

IV. Impact on the students

In general, students achieved better accomplishment. They were most proficient on aspects of word processing, graphics and communication skills, while information and data handling skills were less fixed. Students who use the Internet as a source of information for project work and similar tasks was rising, and thus, they were well-known with many of its characteristics. There was proof of increasing awareness with peripherals and personal technologies such as mobile phones and MP3 players. At the same time, students performed fine on items assessing knowledge and understanding, they were less successful on the items that were necessary including the synthesis of ideas, critical thinking or problem-solving skills. Additionally, achievement rates were also lower on items that required students to assess the use of different technologies and to think of the social and cultural impact of technological innovations. [1]

Using ICT affects the students positively, as it influences the democracy of education, through providing space for the students in choosing the courses they prefer, and sometimes the teacher, resulting in generating feelings of independence and self-confidence, in addition to giving the students the chance to choose what copes with their favorite subjects and their abilities, in addition to the motivation for learning that the use of technology creates inside the classrooms, and widening the students knowledge and critical thinking skills.

V. Conclusion

Technology has forced itself into all aspects of life, it is now a demand for all sectors, and an essential component in our lives. In the past decades technology has changed enormously and unbelievably, therefore, the development of the educational systems become a must, schools now are required to adapt its systems and methodologies to fit in with the prevailing technology, that for sure demands the change in the current curriculum being taught at schools.

The encouraging outcomes of the various studies conducted in this field, and push towards employing ICT innovations in the educational system, taking into consideration the prerequisites of such implantation.

Bibliography

- Condie, R. et al., (2005). The Impact of ICT Initiatives in Scottish Schools: Phase 3: Final Report. University of Strathclyde. [1].
- [2]. [3].
- Condie, R., & Munro, B. (2007). The impact of ICT in schools: Landscape review. Ilomäki, L. (2008). *The effects of ICT on school: teachers' and students' perspectives*. Annales Universitatis Turkuensis B 314.
- Jamieson-Proctor, R., Burnett, P. C., Finger, G., & Watson, G. (2006). ICT integration and teachers' confidence in using ICT for [4]. teaching and learning in Queensland state schools. Australasian Journal of Educational Technology, 22(4), 511-530.
- Smeets, E. (2005). Does ICT contribute to powerful learning environments in primary education?. Computers & Education, 44(3), [5]. 343-355.
- [6]. Tezci, E. (2009). Teachers' effect on ICT use in education: The Turkey sample. Procedia-Social and Behavioral Sciences, 1(1), 1285-1294.
- Wastiau, P., Blamire, R., Kearney, C., Quittre, V., Van de Gaer, E., & Monseur, C. (2013). The use of ICT in education: a survey of [7]. schools in Europe. European Journal of Education, 48(1), 11-27.
- [8]. Yusuf, M. O. (2005). Information and Communication Technology and Education: Analysing the Nigerian National Policy for Information Technology. International Education Journal, 6(3), 316-321.