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Factors Hindering the Implementation of E-learning

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Abstract: Despite the fact that E-learning has been introduced in schools there are still some factors hindering the progress of its usage. While E-learning is widely accepted in the educational system as one of the new age advancements in ICT development and integration, the issue of implementation becomes a matter of concern to the administrators, teachers and to some extent, the students who are at the receiving edge of the technology. This research aimed at examining some of the factors hindering the successful implementation of E-learning in schools. The study explores the basic concepts of E-learning, the effectiveness of E-learning and the nature of the factors hindering the implementation of E-learning in schools. The study concludes on the need to systematically improve on the awareness of E-learning and also provide financial and administrative support to E-learning usage.

INTRODUCTION

The introduction of ICT usage and its integration and diffusion have initiated a new age in educational methodologies and have radically changed traditional methods of teaching and learning patterns in the domain as well as offering contemporary learning experiences to both instructors and students[1]. The traditional methods of learning are currently not matching modern trends and demands in education. The advent of E-learning in schools has changed the face of the educational system making it more interactive, challenging and student-centric. To an extent, it has proven to be more interesting and more effective when put side by side with the traditional mode. As such the E-learning unit has taken both academics and students aboard as a way of improving the technological competencies[2]. The successful use of E-learning in schools can be seen as an impact of ICT in education.

E-learning technologies have the potential to rescue the isolated and underprivileged students from their loneliness and improve the effectiveness of learning by providing immediate and individualized interactions with professors, tutors and peer-students[3].

E-learning in its broadest sense refers to any learning that is electronically enabled[4]. E-learning can also be seen as a flexible learning method that involves the use of internet and the web in and out of campus.

Due to the enormous growth and development of the Internet over the past decades and the experimental use of the WWW and e-mail in education, E-learning emerged as an educational concept during the 1990s and has grown into a globally accepted, even necessary mode of delivery in most educational institutions[5]. The emergence of E-learning in education is actually one of those new technologies usages of the internet and the web in teaching and learning. The new technologies enable

individuals to personalize the environment in which they work or learn, utilizing a range of tools to meet their interests and needs[6].

Despite E-learning emergence and acceptance in schools, its implementation is still a challenge which has created controversy in the education system between the traditional modes which was already and still in use and E-learning which is seen as a new flexible learning using modern technologies and devices. To justify this, Moro[7] agrees that there is a controversy between the traditional mode of delivery and the new modes of delivery.

Many a school of thought felt that with E-learning being implemented in schools, teachers might lose their control of students and to some extent their job. In spite of this controversy, the accelerated adoption and use of E-learning has gained global recognition in the educational system in dissimilating knowledge and its impact on teaching/learning is growing rapidly.

The implementation of E-learning is one major challenge in the education system owing to some fundamental factors. Hence, this research tends to examine some of the factors hindering the successful implementation of E-learning in schools and suggest possible means of resolving these challenges. According to Tarhini *et al*.[8] the successful implementation of E-learning tools depends on the perception of the users and also their knowledge and skills in using computers. Implementation of E-learning needs to be done wisely, with attention paid to institution, staff as well as technological issues.

Effectiveness of E-learning: The development of information technologies has contributed significantly to the growth in E-learning as part of the educational system. And the growth of any nation is tied to the successive progress achieved in their education plans, hence there is need to improve on the education system using new modern ways of learning blended with new technological tools. Improving on the education methodology by implementing E-learning with training given to faculties is a step ahead.

The effectiveness of E-learning can be based from the trainee perceptive. This stems from the fact that a better result is achieved when faculties are given update training on the tools and principles of applying these tools. The effectiveness of E-learning can also be based on the video's presentation[9]. According to Zhang *et al*.[9] this is whether it's interactive or non-interactive. Furthermore, E-learning effectiveness can be influenced by multimedia instruction, interactive learning activities and E-learning system quality[10].

Research had shown that students tend to cope better with interactive based learning than the non-interactive base learning. This was revealed in a survey conducted by Dongsong[11] that students in a fully interactive multimedia-based E-learning environment achieved better performance and higher levels of satisfaction than those in a traditional classroom and those in a less interactive E-learning environment.

For E-learning to be effective, successive planning has to be put in place which is not an automatic process. It should be a gradual process which involves the teacher, the learner and to some extent, the institution. The course curriculum in institutions where E-learning has been or being adopted should not just be fixed for the institutions purpose. Rather, E-learning courses need to be planned for and grounded in an understanding of the roles of teachers and learners, of learning and of how students learn[12]. Halachev[13] pointed out that evaluating E-learning effectiveness is a comprehensive process, as it concerns the interests of training organizations, teachers and trainees.

Factors hindering the implementation of E-learning: According to Tarhini *et al*.[8] the successful implementation of E-learning tools depends on the perception of the users and also their knowledge and skills in using computers. Outlining some factors militating against implementing E-learning in institutions can be categorized as under: social, technological and organizational factors as shown in Fig. 1.

Social factors: In the context of E-learning, social factors are considered factors which relate to changes in the behaviour, interest and lifestyles of teachers and learners in an institution based on their mode of teaching/learning. It can also be seen as the factors and experiences that influence individual's personality, attitudes and lifestyle in teaching/learning which to some extent will influence or affect their perception of E-learning. Some of these social factors are as follows.

Effective awareness: The slow pace of E-learning implementation in some institutions has been due to the lack of awareness of the learning styles. In this case some E-learning teachers and mostly learners are not even or fully aware of this process what it means what it takes and how to use this technology advancement. Lack of creating awareness among users has been a major drawback in the implementation of E-learning.

Integration of ICT in teaching and learning does not only deal with introduction of new hardware and Software but stakeholders (both trainers/instructors and the students) have to adopt new roles and change their ICT behaviors and ways of teaching and learning. Trainings and workshops are needed not only to improve the skills of the instructors but also as a means of getting them involved in the process of implementing and integrating ICTs in teaching and learning[14].

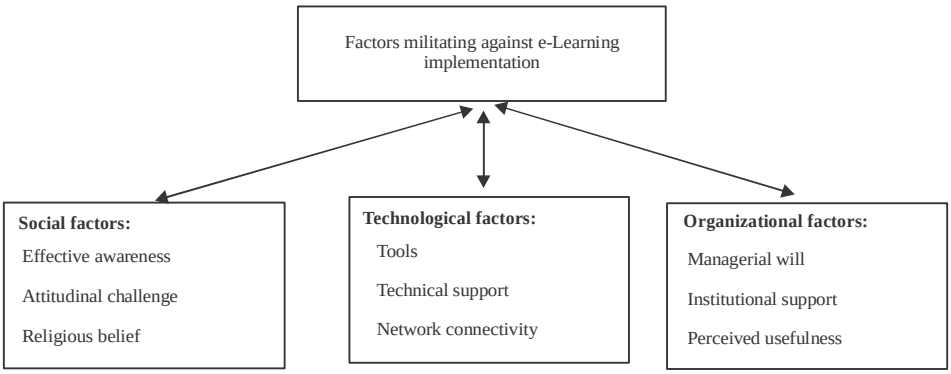

Fig. 1: Factors militating against E-learning implementation

Attitudinal challenge: Likewise the fact E-learning has come to stay to some extent, not all teachers and learners have been able to embrace the E-learning initiative up till date. And also, not all learners are able to learn independently and take the responsibility for their own learning when exposed to such learning.

According to Tusubira and Mulira[15] there tends to be some vague knowledge about ICTs, some interpreting them as simply advanced technologies that require a lot of money and very advanced skills. ICTs are not appreciated as a means of creating efficiency and cost-effectiveness. Lack of effective awareness goes along with attitudinal challenges. Positive attitude towards ICTs is widely recognized as a necessary condition for their effective implementation[16].

Religious belief: As some perceive E-learning from a religious angle to be a welcome development in ICT, others are of the view that it will be lacking the face-to-face advice and inspiration received from teachers during classroom presentation. Teachers are meant to be role model to some students when standing before the classroom and when E-learning is introduced and implemented; this act might fade out of their concept owing to the fact that students only gain knowledge of whatever that is being taught but not inspiration what they get from their teachers. This might pose as some challenges of some student's base on their religious belief that learning have to be face to face with one's instructor. And this will no longer be effective from this mode.

Cultural differences: People have their different cultural believes which also might lead to their various ways of accepting E-learning for teaching and learning purpose. Al-Adwan and Smedley[17] pointed out that cultural factors have tremendous impact on how people learn including the style of interaction and communication, constituting the core foundation of E-learning. These:

TECHNOLOGICAL FACTORS

These are the efficiency and effectiveness of ICT tools used in E-learning. Some technological factors identified as major barriers to effective implementation of E-learning are:

E-learning tools: Companies and industries have developed an almost countless number of unique E-learning tools, techniques and technologies to help in the design of E-learning[18]. According to Oghenegweke[19] these technologies may include but are not limited to, the following: presentation technologies (e.g., PowerPoint) the Internet, video conferencing, e-mail, specialist disciplinary Software, learning management systems such as WebCT, simulations and educational games. Lack of design principles and method of Human Computer Interaction (HCI) and Learning Management System (LMS) its improvement and maintenance among teachers and whoever is in-charge is a major problem. Also complexity of the tools, insufficient and up-to-date tested ICT tools is still a problem to its acceptance and usage.

Technical support: In order to use the E-learning tools effectively, teachers and learners need support whenever necessary during the use of these tools. Most institution lack this service and others tending to use E-learning failed to provide this service. Hence, these pose as drawback to effective use of these tools for E-learning.

Internet network connectivity: E-learning is a learning that involves the use of the internet. Hence, users involve in this learning need reliable and affordable bandwidth and robust internet network for this purpose. Lack of this service and in some case, non-availability of this service tends to pose a serious drawback to the successful implementation of this service in schools.

ORGANIZATIONAL FACTORS

The organizational factors are top management support, decision-making structure, management style, managerial IT knowledge, goal alignment and resources allocation in E-learning.

Managerial will: The move to E-learning opens up the need to find robust ways of funding learning. Financial resources form a key factor to the successful implementation and integration of E-learning in education. It is obvious that countries with higher financial resource bases stand a good chance than those with limited resources to reap benefits offered by ICTs.

E-learning management is new as a result of advancement in ICT. Hence, improper administrative plans and suggestion lack the growth of this educational U-turn technology. While some top administrators sees it as stepping approach towards rendering effective and flexible education, others sees it as creating an environment where learners are not practically inform of what they are supposed to know. This is as a result of some negative attitude by top administrators, lack of understanding of the concept of E-learning which is a major challenge and the inability to clearly define E-learning in the educational system. Professional development: keep up with the new learning paradigm to meet the 21st century learners 'needs.

Dwyer *et al*.[20] emphasizes that for the integration of ICTs to be effective and sustainable, administrators themselves must be competent in the use of the technology and they must have a broad understanding of the technical, pedagogical, administrative, financial and social dimensions of ICTs in education. Managerial support is critical to the successful integration of ICTs into teaching and learning processes. Managers/Administrators can provide the conditions (ICT policy, incentives and resources) that are needed. A very critical factor for the successful implementation of ICTs is the commitment and interest of the top management and other leaders at every level.

Institutional support: The regulatory bodies which are tend to provide decision for the growth of the institutions are not fully supported when it comes to issues of new innovation, positive ideas, enforcement of suggested decision, provision of financial support in purchasing the needed tools and training of teachers inclusive of technical support staff if available are notable challenges in the sustainable implementation of the E-learning approach. Government and non-governmental agencies inability to support institutions which tend to implement E-learning is also posing as a drawback.

Perceived usefulness: The flexibility of time, place and pace of study. Some institutions see E-learning as time wasting where instructors have to demonstrate with video presentation and students not showing seriousness towards learning, since, instructors are not physically present whenever the students are taking their class. Where and how fast E-learning will be disseminated and the acceptance mode is another major hindrance to its implementation from the institution point of view.

SUGGESTION

- Generally, the suggestion of this study will assist educational administrators at all levels to implement and adopt the use of E-learning in their various institutions
- Providing awareness which will also lead to positive acceptance of E-learning. By creating an awareness center within the campus this can motivate the use and adoption of E-learning
- Staff training should be encouraged at all levels in the institutions. Pelgrum[21] recommends staff training to be a continuous process for regular updates with the development of ICTs
- Customization of E-learning tools to support learners religious and cultural beliefs will ease the difficulties in the implementation of E-learning
- Provision of simple update and sufficient tools which are user-friendly should be provided. There is a need for a comprehensive and coherent approach to the development in and use of resources for E-learning that enables academics timely access to professional development, acknowledgment of their achievements that complements knowledge building and sharing across institutional structures and builds on a research-led approach that integrates academic development into a scholarly activity[22]
- ICT technical support staff should be made available by institutions on timely and ongoing. Staff needs to be 'e-enabled' to take advantage of the use of technology by creating an interactive environment including a clear policy for raising awareness, training program, improving infrastructure. With the rapidly changing technology, recent research on training points out that investment in both educating and training people is considered as growth factor[23]
- Without the internet, learners and even teachers cannot stuff the web. This has to be provided and in an affordable cost with better and more improved services

- Technical committees should be set and put in place in institutions to administer the decision which should be allowed being implemented. Administrators should also be given training on the concept, awareness and benefit of E-learning, establishing a strategy and action plans to accelerate the deployment of an interactive E-learning process
- Institution governing bodies, government and non-government should provide financial and all other necessary support for E-learning enhancement. Capacity building and incentive system including training, attending conferences, providing credit needed for promotions, providing awards for professors who develop outstanding contents or for faculty with excellent records in managing E-learning have to be encouraged. It is very important that stakeholders must be actively involved in the implementation process in addressing the attitude problems and this can be carried out by trainings and organized awareness programmes, visits to similar institutions where there has been proven success and these can cause a positive change of the attitude of stakeholders in ensuring that the vagueness is gradually eradicated
- In solving the problems of limited funding, higher learning institutions can acquire open source software for teaching and learning activities; continually apply for funds from their governments; and diversify sources of funds to have a wide financial base

CONCLUSION

This study has outlined and examined some of the factors in the implementation of E-learning in institutions. Possible suggestion has been given by this research on how these factors can be handled. If successfully implemented, the advancement and adoption in the use of E-learning in institutions will be more efficient and highly effective in disseminating knowledge in and outside campuses. This will also improve the flexibility of learning and a better approach to interactive learning. There is need for institutions to systematically improve on the awareness of E-learning and also provide financial and administrative support to E-learning usage.

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