

IMPLEMENTATION OF E-LEARNING IN TEACHING

Lazar Stošić

College for Preschool Teachers, Aleksinac, Serbia
lstosic@vsvaspitacka.edu.rs

Samson O Fadiya

Girne American University, Turkey
greaterachiever@yahoo.com

Zafer Ağdelen

Girne American University, Turkey
zagdelen@gau.edu.tr

UDK: 37.018.43:004(497.11)

Abstract

Today more and more we talk about a new form of knowledge transfer and learning based on the application of new modern information and communication technologies (ICT). New forms of knowledge transfer and learning using new modern information and communication technologies is e-learning. E-learning requires the rapid growth of knowledge and always changing plans and programs which are dependent on new innovative methods. This new vision of learning can be modernized educational process and teaching itself. The paper gives an overview of the conceptual definition of e-learning as well as its implementation in the process of instruction. A particular emphasis is given to the advantages of e-learning compared to traditional education in our country and the neighboring countries.

Keywords: E-learning, teaching, application of ICT.

INTRODUCTION

Today there is some defining e-learning. According to (Alavi & Leidner, 2001), e-learning is an approach to learning with technologies that allow students to interact with teachers, peers, teaching materials, and all with the help of modern technology. It combines two main areas: learning and technology. In this case, the technology has the role of adjuvant in facilitating learning. E-learning is recommended as an alternative to face-to-face education to facilitate learning the whole lifetime learning (Karaman, 2011; Lahti et al., 2014). In fact, studies have shown that lack of knowledge of working with ICT has had an impact on learning among students (Button et al., 2013). Today there is numerous literature related to e-learning, and that number is steadily increasing (Aparicio, threw, & Oliveira, 2014).

Barlovac and Aničić (2010) point out that all definitions can be classified into two groups, to define e-learning. The first group consists of technical descriptions, and they put the emphasis on technology, while the second group includes definitions of teaching and they are focused only on education and learning as such from the acquisition of knowledge. From the pedagogical point of view, this approach is closely related to e-learning (Dabbagh, 2005). Simovic and Karavidić (2010) point out that the group of technical definitions, e-learning is the learning, teaching or education that is supported computer technology and the Internet. While from the group teaching definitions, by them, e-learning is an interactive process that takes place

between teachers and students and who is assisted by electronic media or as a support media. A bombastic diversity quality of information (data) references reporting educational, as well as not at all like social insights on the Internet. As yet, applying information from mainly isolate sources could challenge, even at the point when the information (data) are openly available that portray diverse parts of institutional research. The inadequacy of openness and accessibility information is a major big-name, Fadiya, S. O., Saydam, S., & Chukwumeka, E. J. (2014).

According to Milovanovic (2013), there are four models of e-learning. The first model is the traditional model of teaching and learning in the classroom; the second model is a model of learning and teaching that takes place with information and communication technology. The third model is a mixed model that combines the traditional design and information and communication technologies, and the fourth model is a model in which classes takes place at a distance with the help of information and communication technologies.

The e-learning system consists of three essential elements, namely: (1) LMS (Learning Management System), it is a set of standardized components for Learning, and its purpose is that in a very short period provide a centralized learning environment using a computer. (2) Content (Content), it is the process of learning, and it provides a multimedia learning experience using the images, sounds, and animation; (3) Collaboration (Collaboration) is communication, that is, cooperation between participants and mentors continue attendant (Viduka, D., Viduka, B. 2012). Learning improvement licenses more noteworthy learner intuitiveness and advances students' productivity, inspiration, psychological viability, and adaptability of learning style. Learning is a profoundly individual experience: we learn because we need to learn. By empowering learners to be more dynamic members, an all-around composed e-learning background can rouse them to turn into more connected with the substance. Intuitive taking in movements the center from a detached, teacher-centered model to one that is dynamic and learner focused, offering a more grounded learning boost.

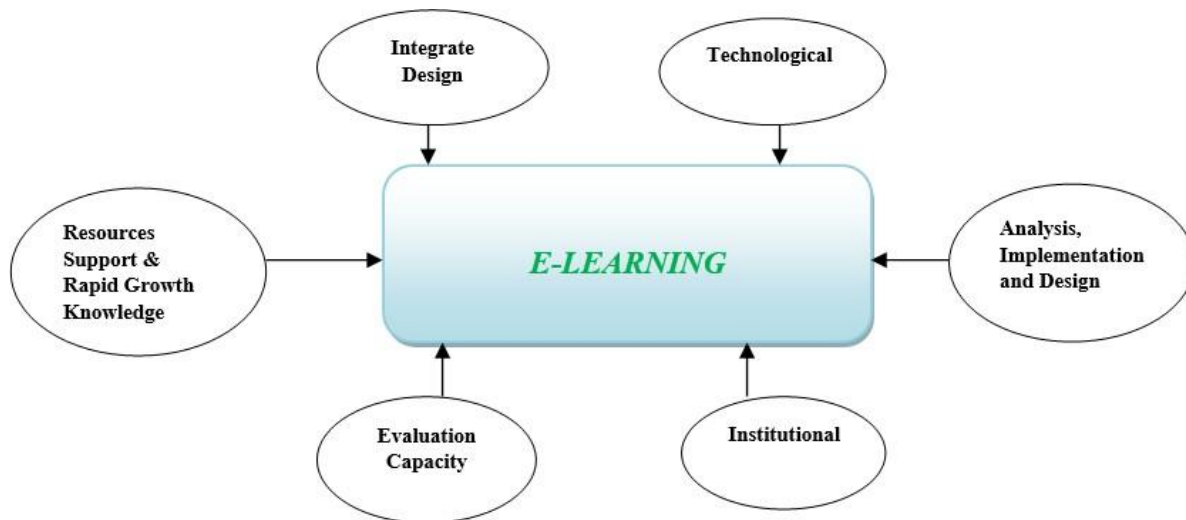
Intelligence keeps up the student's advantage and gives a way to person practice and support. Proof proposes that e-learning is more productive because students pick up information, abilities, and states of mind speedier than through conventional teacher drove techniques (Jethro, O. O., Grace, A. M., & Thomas, A. K. (2012). Fast advancement of these present day information correspondence innovations has extraordinarily changed each walk of life.

This interest has empowered instructors to reclassify a few impression of securing conveying new difficulties for them to face, for example, coordinating systems management into educational programs, fitting online tasks to suit module learning results, outlining and directing PC based evaluations, giving compelling criticism on students' work, and so forth. This study goes for investigating the impression of students and instructors in regards to the utilization of e-learning showing apparatuses, the difficulties they face and a few methodologies to improve the practical use of these devices in classroom-based teaching.

APPLICATION OF E-LEARNING IN THE CLASSROOM

E-learning in the classroom can contribute to a better quality of teaching. As we have said e-learning is based on the use of computers and the Internet, so teachers using computers and the Internet can study the actual courses that are dedicated to a given area. Then, the teachers via the Internet can take pictures of documents, sound recordings or animations that can be applied in the classroom. Research conducted by Lowther et al., (2012) suggest that educational technology has not yet taken the right place about its recommendations.

On the Internet, teachers can consult a variety of sources, to analyze information, to formulate and implement content to create applications that can continue to apply individually or as a material support presentations. Classes that uses the Internet can have an optional form, can represent a break from the usual, traditional structures of teaching. The Internet as a medium of education and provides excellent opportunities for the use of interactive materials, using authentic materials, temporary or permanent archiving of results and projects. Also, monitoring new developments in the relevant fields, monitor video conferencing in real time, connecting teachers and students with the world, establishing cooperation with colleagues around the world, getting feedback, learning and training out of school. With e-learning the educator can have a visitor address without spending much cash. It should be possible, with cameras for both the speaker and the understudies, and with the utilization of receivers to encourage the same level of cooperation that would be conceivable if the speaker were physically present in the room. The additional advantage comes in when we can replay the address and increase significantly more out of it. Understudies that passed up a great opportunity can see the recording or understudies that went to can watch it again to assist their comprehension.



Source: Fadiya S.O.

Despite the fact that e-learning offers simplicity, adaptability, and the capacity to get remotely to a classroom in the understudy's own particular time, learners may feel a feeling of disconnection. On account of learning online is a performance represent the most part, which may give the student the inclination that they are acting entirely alone. As innovation advances and e-learning in advantages from the progressions being made, learners can now draw in all the more effectively with educators or different understudies utilizing apparatuses, for example, video conferencing, online networking, and exchange discussions amongst others.

ADVANTAGES AND DISADVANTAGES OF E-LEARNING

Everything has its pros and cons including e-learning. Key benefits of e-learning are: an individualized approach to pupils and acceptance of different learning styles; better interaction of teachers and students; higher quality of teaching and increase the likelihood of adoption records, incitement to analytical thinking, synthesis of acquired knowledge. Moreover, independence in

problem-solving and decision making; inclusion of different profiles of participants; simpler vocational training or retraining; more straightforward organization of lectures international experts via video conference transmission, reducing the need for mobility of teachers and students; Distance learning (in the field of e-learning). In addition to the key advantages of e-learning, there are some key disadvantages of e-learning.

The principal disadvantages of e-learning are: some areas cannot be studied solely in electronic form. There is still adequate 'electronic book' 'that would satisfy all the needs of students of different types of materials required for specific topics; loss of human contact, body language, the emergence of misunderstanding; absence of essays, oral examinations. The problems caused by insufficient knowledge of technology for the implementation of re-education; retired from teaching after a period the problem of maintaining interest in the subject (http://www.lugram.net/e_ucenje/predn_nedost.html).

Information investigation has caught the consideration of a business pioneers and innovation organizations as well as instructive divisions. The far reaching any desire for research is that novel information can be profited from top to bottom examination of the information mark granted case-by-case in their shared activity with others, data, technology, and organizations. The speedy exploitation of "big data" logical arrangements and tools go with modern, management and procedures in more prominent organizations. Academic analytics, related to the business investigation, are worried about enhancing authoritative information gathering and adequacy (Fadiya, S. O., Saydam, S., & Chukwuemeka, E. J., 2014).

The Learning examination grasps the trust of a fiercer investigation result, adequacy and excellent yield in instruction. What's more, help leaders, learner, and teachers with a sound understanding of classroom exercises and course level?

Through e-learning, as indicated by Raba (2005), goals can be proficient in the briefest time with a minimum measure of exertion. Both learners and teachers can have the capacity to achieve and keep up with advancement as they acquire experience that is given by various masters in the different fields of information. The effects of e-learning on instructive morals as indicated by Khan (2005) are guaranteed. Since the situations for e-learning are tolerant, so they are decent methods for offering break even with access to the data world independent of the areas of the clients, their ages and also ethnic starting points, and races (Khan, 2005).

Nature for e-learning moreover helps learners or understudies to rely on upon themselves for the reason that teachers are no more the single learning source. They rather get to be counselors and aides (Alsalem, 2004). E-learning additionally helps in the planning of the general public to all-inclusive impact and to exchange with others (Zeitoun, 2008). However as indicated by Algahtani (2011), the presumable advantages of e-learning are more noteworthy than the benefits of customary learning if e-learning is utilized and connected as a part of legitimate ways.

Establishment choices on private systems for security or more remarkable transfer speed. On the off chance that we choose intranet conveyance, we have more control over modules and transmission capacity, giving us more alternatives for incorporation in our WBT. Economical overall transportation - No different or unmistakable dissemination component is required (i.e., dispersing CD-ROMs for CBT preparing). WBT (Systems provides Top Class, an intuitive, complete and proven Learning Management System that evolves with your organization) can be gotten to from any PC anyplace on the planet while in the meantime holding conveyance costs down.

The simplicity of worldwide distribution - The progressions we make to any of our global distribution are promptly accessible to our learning gathering of people over the world. Direct access to numerous other preparing assets - The Internet offers access to the biggest library on the planet. Profit by the offerings that have as of now been made, and utilize them to upgrade the learning we are dispersing. Extendibility, Accessibility, and Suitability - Users can continue through a preparation program at their particular pace and at their particular spot. They can likewise get to the preparation whenever, accepting just as much as they need. As such, "in the nick of time and naturally enough."

RESEARCH ON THE ATTITUDES OF TEACHERS ON THE APPLICATION OF E-LEARNING IN THE CLASSROOM

Some of the questions in the survey conducted by the V. Stevanović and M. Stevanović (2010) referred to the willingness of teachers to use ICT in teaching and training of teachers on the application of ICT in education. Regarding the issue of readiness to use ICT in teaching, we have got 76.6% responded with 'yes,' while 23.4% of 'not sure' that they are willing to use ICT in teaching. For the question of training on the use of ICT in education, 85.5% responded are with 'yes,' 12.9% said 'not sure,' while only 1.6% 'no.' From the results came to the conclusion that it is necessary to educate teachers about the possibilities of e-learning to change their minds and accepted e-learning as well as traditional learning.

In a study conducted by the Christmas and Krnjeta (2011), respondents were 334 teachers from secondary vocational schools. The results showed that 70.7% of teachers are not ready for the introduction and implementation of e-learning in the teaching process while 22.3% of teachers would be able to ask the next school year to introduce and implement e-learning in the classroom. Also, the results showed that 86.1% of teachers need education, 9.8% of teachers are not required, and only 4.1% is not interested. Teachers' opinions about the major obstacle to the introduction and implementation of e-learning state in the first place lack of competence, then, lack of information, lack of motivation, lack of adequate equipment and other reasons. Based on the results come to the conclusion that teachers have a positive attitude towards the introduction of e-learning in the classroom, except that they need additional education and training in performance and prepare to teach electronic materials.

In a study conducted by Radovanović and Karić (2011) showed that teachers fully agreed that ICT could enhance teaching and learning process. Also, most teachers completely agree that ICT plays a significant role in professional development. Based on all of the results have come to the conclusion that teachers have a positive attitude about the use of information and communication technologies, also to the use of ICT can improve the process of teaching and the professional development.

Also, Simeunović (2011) conducted a study where the question 'Are you ready for the use of ICT in education?', 72.6% of teachers answered 'yes,' 19.4% were not sure, while 8% are not willing to use ICT in teaching. To the question 'Are we ready for the training of ICT in education?', 80.3% answered positively, 16.1% were not sure while only 3.6% of teachers responded that they were not ready for development of ICT in teaching. She came to the conclusion that it is necessary to educate teachers for the implementation of e-learning, to change their minds and accepted e-learning as they approved the traditional view.

The study, which was conducted on a sample of 313 primary school teachers in Jablanica region showed that 76.7% of teachers feel the need for training to be able to use e-learning in the

classroom. While only 1.9% of teachers believe that it is necessary to improve the application of modern educational technology in teaching (Nikolić, V. Velickovic, D., 2012).

The study, which was conducted in 2014 on a sample of 143 primary and secondary schools, showed that 54 (37.8%) of teachers mainly disagreed with the statement that teachers are interested in e-learning vision. Also, 46 (32.2%) of teachers agree, and 27 (18.9%) of teachers strongly agree that they are interested in e-learning vision. There are a small number of teachers (9.8%) who do not agree, and only two (1.4%) is very disagreed with the statement that teachers are interested in e-learning vision. Given the fact that a larger number of teachers interested in the electronic form of learning, and therefore 38.5% and mostly agree, 26.6% agree and 16.1% strongly agree that gladly attend seminars via the Internet. Since a larger number of teachers interested and happily attend seminars via the Internet, so that 20.3% of teachers strongly agree, 34.3% agree and 30.1% agree that knowledge with electronic lessons applied in everyday work. In this study, the authors came to the conclusion that teachers are interested in attending the electronic workshops via Internet and using that knowledge in daily work (Stošić, L., Stošić, I. 2015).

Instructors' attitudes are considered as a noteworthy indicator of the utilization of new advances in the instructive settings. Along these lines, their attitudes of mind toward PC can assume an imperative part in the acknowledgment and real use of computers. The efficient usage of innovations in the classroom depends primarily on the educators' attitudes toward these instruments (Kluever, Lam, Hoffman, Green and Swearinges, 1994). Consequently, it can be reasoned that the disposition further identified with the use recurrence of innovation and utilization measure of the innovation. Subsequently, a placement assumes an imperative part in deciding individuals responses to circumstances. A survey of the thoughtful writing uncovers differing meanings of attitudes. Different scientists characterize mentality as a positive or negative enthusiastic response toward a particular situation.

CONCLUSION

In this paper, based on analysis of previous research can be concluded that teachers have predominantly positive views about e-learning, which means that they are interested and like to use this form of e-learning, or that they need additional improvement in performance and prepare electronic educational materials. The current and flow study has added to the examination about the utilization of data (Information) and correspondence innovation during the time spent educating and learning contemplates.

The discoveries of this exploration have given more regard for the level of ICT use with a specific end goal to increment and empower the utilization of ICT. Primary and Secondary Learning has either point of interest or inconveniences. One of the major points of interest is that it empowers to get new information relentless on the implementation of e-learning in teaching.

References

1. Alavi, M., & Leidner, D. E. (2001). Knowledge management and knowledge management systems: conceptual foundations and research issues. *MIS Quarterly*, 25(6)
2. Algahtani, A.F. (2011). Evaluating the Effectiveness of the E-learning Experience in Some Universities in Saudi Arabia from Male Students' Perceptions, Durham theses, Durham University.
3. Alsalem, A. (2004). Educational Technology and E-learning, Riyadh: Alroshd publication.
4. Aničić, O., Barlovac, B. (2010). Učenje na daljinu – e-obrazovanje. U: *Tehnika i informatika u obrazovanju*, 3. Internacionalna Konferencija, Čačak, Tehnički fakultet, 761–766.
5. Божић, Љ., Крнета, Р. (2011). Istraživanje o stavovima i spremnosti nastavnika za uvođenje e-učenja usrednje stručne škole, *Технологија, информатика и образовање за друштво учења и знања*, б. Међународни Симпозијум, Технички факултет Чачак
6. Dabbagh, N. (2005). Pedagogical models for e-learning: A Theory-based design framework. *International Journal of Technology in Teaching and Learning*, 1(1), 25–44
7. Fadiya, S. O., Saydam, S., & Chukwuemeka, E. J. (2014). Big Data in Education; Future Technology Integration. *The International Journal of Science and Technoledge*, 2(8), 65.
8. Jethro, O. O., Grace, A. M., & Thomas, A. K. (2012). E-Learning and its effects on teaching and learning in a global age. *International Journal of Academic Research in Business and Social Sciences*, 2(1), 203.
9. Khan, B. H. (2005). Managing E-learning: Design, Delivery, Implementation and Evaluation, Hershey, PA: Information Science Publishing.
10. Kluever, C., Lam, T. & Hoffman, R. (1994). The computer attitude scale: Assessing changes in teachers' attitudes toward computers. *Journal of Educational Computing Research*, 11(3), 251-256.
11. Lowther, D. L., Inan, F. A., Ross, S. M., & Strahl, J. D. (2012). Do one-to-one initiatives bridge the way to 21st century knowledge and skills?. *Journal of Educational Computing Research*, 46(1), 1-30.
12. Миловановић, С. (2013). Електронско учење и трансформација образовног процеса. Национална конференција са међународним учешћем, Факултет техничких наука у Чачку, Септембар 2013, стр.224-232.
13. Николић, В., Величковић, Д. (2012). Електронско учење у основном образовању, *Техника и информатика у образовању* 4. Интернационална Конференција, Технички факултет Чачак, 439-445.
14. Rabah, M. (2005) E-learning, Jordan: Dar AlInnahej Publisher.
15. Simović, D., Čukanović-Karavidić, M. (2010): E-obrazovanje. U: *Tehnika i informatika u obrazovanju*, 3. Internacionalna Konferencija, Čačak, Tehnički fakultet, 761–766.
16. Симеуновић, М. (2011). Модернизација основног и средњег стручног образовања увођењем e-learninga, *Технологија, информатика и образовање за друштво учења и знања*, б. Међународни Симпозијум, Технички факултет Чачак, str. 491-502.
17. Стевановић, В., Стевановић, М. (2010). Спремност високошколских наставника за иновације у раду помоћу ИКТ и Е-учења, *Техника и информатика у образовању*, 3. Internacionalna Konferencija, Čačak, Tehnički fakultet, 258-264.
18. Стошић, Ј., Стошић, И. (2015). Електронско учење наставника, *Учитељски факултет*, Лепосавић
19. Видука, Д., Видука, Б. (2012). Појам и имплементација електронског образовања у Србији, *Техника и информатика у образовању* 4. Интернационална Конференција, Технички факултет Чачак, 461- 468.
20. Zeitoun, H. (2008). E-learning: Concept, Issues, Application, Evaluation, Riyadh: Dar Alsolataeh publication.

References from web

1. Aparicio, M., Vasco, F., & Oliveira, T. (2014). Trends in the e-learning ecosystem: A Bibliometric study. In *Proceedings of 20th American Conference on Information System*. Retrieved from <http://aisel.aisnet.org/amcis2014/Posters/ISEducation/7>
2. http://www.lugram.net/e_ucenje/predn_nedost.html
3. Karaman, S., 2011. Nurses' perceptions of online continuing education. *BMC Med. Educ.* 11

- (1), 86. <http://dx.doi.org/10.1186/1472-6920-11-86>
4. Lahti, M., Hätönen, H., Välimäki, M., 2014. Impact of e-learning on nurses' and student nurses knowledge, skills, and satisfaction: a systematic review and meta-analysis. *Int. J. Nurs. Stud.* 51 (1), 136–149. <http://dx.doi.org/10.1016/j.ijnurstu.2012.12.017>.