

This is an electronic reprint of the original article.
This reprint *may differ* from the original in pagination and typographic detail.

Author(s):	Ålander, Heidi; Karukka, Minna
Title:	Charting teachers' perspective on utilizing distance learning in higher education
Year:	2016
Version:	As published

Please cite the original version:

Ålander, H. & Karukka, M. (2016). Charting teachers' perspective on utilizing distance learning in higher education. In Ferit Uslu (Ed.), *Proceedings of INTCESS2016 3rd International Conference on Education and Social Sciences* (pp. 128-130). Istanbul: International Organization Center of Academic Research.

CHARTING TEACHERS' PERSPECTIVE ON UTILIZING DISTANCE LEARNING IN HIGHER EDUCATION

Heidi Alander¹ and Minna Karukka^{2*}

¹Researcher, Oulu University of Applied Sciences, Finland, heidi.alander@oamk.fi

²Senior Lecturer, Oulu University of Applied Sciences, Finland, minna.karukka@oamk.fi

*Corresponding author

Abstract

E-learning activities are likely to grow significantly and the area has potential to generate more possibilities for both teachers and students especially in higher education. It creates alternative ways to partake, tutor and utilize new learning environment. In this paper we present our on-going work on exploring current usage and attitudes towards using eLearning technologies in teaching. The aim was to investigate advantages, challenges and needs for support among teachers in higher education. In our case, focus was to concentrate on distance learning more than e-learning in general.

The results show that the perceived advantages of distance learning were dominated by independence concerning of time, place, flexibility and individual options. Distance learning was seen flexible and enhancing of students' freedom of their own studies. More surprisingly distance learning was perceived more activating than traditional learning increasing presence, participation and both communal and individual learning. In addition the results revealed that there is emerging need for building deeper understanding of challenges faced by teachers utilizing distance learning. It is important to take into account that continuous and relevant training, peer support for educators are key factors in order to increase usage of eLearning methods. It requires also more straightforward tools and services to support learning gains and enhance usage of distance learning in higher education.

Keywords: e-learning, distance learning, higher education, current state analysis

1. INTRODUCTION

Technology Acceptance Model TAM (Davis, 1989) is based on Theory of Reasoned Action TRA (Ajzen and Fishbein, 1980) which states that behavior of a person is the function of both attitudes and beliefs. TAM core factors are perceived usefulness and perceived ease of use. These two with external variables influence on person's attitude toward using which is a key factor for behavioral intention to use certain technology. (Masrom, 2007) The factors explain actual system use and it has been studied, that TAM is useful model for understanding the attitude of teachers to use technology in teaching. (Nair and Das, 2012)

Nair and Das (2012) researched teachers' attitude towards using technology in teaching based on their proposed Teacher's Attitude towards Technology Use Model (TATUM). The findings indicated that teachers'

perception about ease of use dominated their attitude towards using technology in teaching. Also teachers' perception about usefulness was significantly affected by the perception about ease of use. Thus it was indicated that adequate training is essential for teachers finding technology more useful and having positive attitude towards it. (Nair and Das, 2012)

However, a previous finding indicates that perceived usefulness was not significant to intention to use e-learning even though perceived ease of use was not only significant but also powerful in predicting intention to use (Yuen and Ma, 2008). It is also examined, that besides key determinants of TAM there can be other factors moderating the relationship between attitude and intention toward e-learning technology, such as subjective norms of peers, at least among students (Cheung and Vogel, 2013).

2. OUR RESEARCH

2.1 Background of the study

In this work, TAM and TATUM was used for the basis of the research inquiry. Inquiry was done in digitally and it was sent to teachers in higher education via email in Oulu area. Teachers were asked to describe how useful do they see using distance learning tools in their work and what challenges they had encountered. It was also paid attention what kind of previous experience teachers had and what kind of support they would see useful concerning the educational project.

E-learning, also known as online learning, has many definitions and its pedagogical thinking is closely related to the computer based learning. E-learning is the use of ICT to support both teaching and learning activities and it can be seen as any form of education facilitated by the internet and related technologies. When implementing e-learning initiatives, it requires number of issues be considered, including pedagogical, technological and individual factors. (Masrom, 2017)

In our case, we decided to concentrate on distance learning more than e-learning in general. The basic idea of distance learning is that there are arrangements made for students who are geographically separated from teachers. Implementing distance learning requires number of functions to be completed starting from setting up of systems to establishing a well-organized student support system. (Lentell, 2012)

2.2. Results

The results show that the perceived advantages of distance learning were dominated by independence concerning of time, place, flexibility and individual options. Distance learning was seen flexible and enhancing of students' freedom of their own studies. More surprisingly distance learning was perceived more activating than traditional learning increasing presence, participation and both communal and individual learning.

The most challenging things in distance learning on teachers' perspective were pedagogical and technological skills. Pedagogical issues included individual mentoring and providing feedback whereas technological perspective was perceived problematic for both teachers and students. It was also emphasized that despite the skills of participants, technology itself may have major problems. In addition, other challenges from the teachers' perspective were students' lack of commitment, motivation and independent learning. Teachers were also concerned about communication as well as learning material and intellectual property rights.

Most of the teachers felt that peer support was the major element of cooperation between teachers concerning distance learning. It included sharing ideas and experiences and having discussions of technological and pedagogical issues. Some of the teachers had created digital course material together but only minority had experience of co-teaching or planning together. A few teacher was acting as a mentor to other teachers.

The support that teachers would like to receive from employer was more fragmented. Some of the teachers requested pedagogical training whereas others lacked technical skills. Hands-on workshops, best practices of colleagues and training of material production including intellectual property rights were all mentioned commonly. However, not all of the teachers were interested in training or support due to their good basic skills or lacking knowledge of eLearning in general.

The results revealed that there is emerging need for building deeper understanding of challenges faced by teachers utilizing distance learning. It is important to take into account that continuous and relevant training, peer support for educators are key factors in order to increase usage of eLearning methods. It requires also

more straightforward tools and services to support learning gains and enhance usage of distance learning in higher education.

3. CONCLUSIONS AND DISCUSSION

In this paper, we have presented a study in which we investigated the current state of e-learning usage in higher education in Oulu. Based on our results recommendations in enhancing the usage of distance learning tools are:

- It is important to provide relevant training on understanding how to active learners and how tools support learning gains.
- Peer support for educators is vital and should be encouraged.
- Atmosphere and resources should be balanced for productive work and attitude.

It was possible to recognize a few key barriers preventing to benefit in e-learning:

- Support and training (both technical and pedagogical) for taking environments in to a use is critical
- Technology and different application for distance learning are wide and possibilities tend to confuse teachers.
- Usage of distance learning tools currently takes more time than traditional teaching in teachers' point of view.

We acknowledge that our research has limitations, especially with a limited number of study participants from small geographical area. Also as a future work, we wish to deeper investigate and observe work environment and distance learning tools in practice, and in particular discover factors that are needed to develop the field.

4. ACKNOWLEDGEMENT

This research was financially supported by the European Social Fund and it was a part of project CREATO – Growth and strength into business through creative competence.

REFERENCE LIST

- Cheung, R. and Vogel, D. (2013). Predicting user acceptance of collaborative technologies: An extension of the technology acceptance model for e-learning. *Computers & Education*. Apr2013, Vol. 63, pp.160-175.
- Lentell, H. (2012). Distance learning in British universities: is it possible? *Open Learning*. Vol. 27, No. 1, February 2012, pp.23–36.
- Masrom, M. (2007). Technology Acceptance Model and E-learning. 12th International Conference on Education, Sultan Hassanah Bolkuah Institute of Education, 21-24 May 2007.
- Nair, I. and Das, V.M. (2012). Using Technology Acceptance Model to assess teachers' attitude towards use of technology as teaching tool: A SEM Approach. *International Journal of Computer Applications*. March 2012, Vol. 42, No. 2.
- Yuen, A.H.K. and Ma, W.W.K. (2008). Exploring teacher acceptance of e-learning technology. *Asia-Pacific Journal of Teacher Education*. August 2008, Vol. 36, No. 3, pp.229–243.