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## Technology oriented efforts to support faculty in online learning environment

M. Recep Okur<sup>a</sup>\*

<sup>a</sup> *Anadolu University, Eskisehir, 26470, TURKEY*

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### Abstract

Faculty members' roles change in distance education unlike traditional education and they take new roles. According to these new roles, faculty encounters different problems in distance learning processes. Faculty need support for overcoming these problems. This study attends to demonstrate support needs of faculty members for online learning environments in context of technology. Technology oriented support for faculty members are discussed and recommendations are presented in this study. In this context problems and solutions are presented via related literature review and experiences.

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*Keywords:* Faculty support, online learning, distance education

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### 1. Introduction

Distance education is a teaching-learning system where different technologies are used to provide provision of communication and interaction, learner monitoring, content production and presentation. A learner is responsible to sustain and successfully complete a distance education program. Distance education is based on self-directed learning and the learners are responsible for their own learning experiences. Besides, faculty members can take different roles such as moderator, instructor, adviser, mentor, facilitator and content provider in many components of distance education systems. Faculty interacts with learners in these different roles.

Faculty's intellectual wealth is institution's principal asset. Institutions provide solutions to barriers that faculty face in distance education environments. The importance of all faculty members in achieving institutional goals is obvious (Gappa, 2008). In this context, providing faculty support is an issue in distance education activities which needs to be examined. Effective use of technology and appropriate selection are important in teaching-learning environments. Faculty faces different barriers due to using of this technology in distance education applications. Overcoming barriers are very important to effectiveness of distance education.

### 2. Background

Distance education is a learner centered system. In this learning system learners are responsible for their own learning experiences. However, faculty members take a facilitating role for learners. Faculty have more responsibility in this role in contrast to traditional education. Instructors are not only the narrators. For that reason, increasing the

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\* M. Recep OKUR. Tel.: +90-222-3350580/2572; fax: +90-222-3200378  
E-mail address: [mrokur@gmail.com](mailto:mrokur@gmail.com)

faculty's knowledge and experiences is important. Especially in the context of technology, faculty need to be supported to create effective distance education applications. This support should be provided by institution. At this point, the priority concern is to determine the problems faced by faculty members and understanding of their changing roles. Then, appropriate support solutions can be produced to these problems.

### *2.1. The changing role of faculty in distance education*

Possibilities of technology heavily used in distance education system. For this reason, distance education is a technology oriented system. Different technologies used in various distance education components. Therefore, faculty members need to have knowledge and experience in the field of technology. However, at this point due to the use of technology-intensive faculty may encounter some problems. To overcome these problems, faculty need to be adapted to change. Faculty's instructor role changes in the process in online learning environment. Howell, Saba, Lindsay and Williams (2004) emphasize that increased university interest in distance education and the integration of technology into higher education bring about changing faculty roles.

Instructor role is different from the traditional education role in distance education. The instructor performed more as an active and dedicated facilitator than a traditional teacher and a consulting expert on the content of the course. (Turoff, Howard, & Discenza, 2009). Instructors are responsible for information presentation in traditional education environments. The instructor can be more active when the learner is in passive position. This is not an effective learning environment. However, changing role of the faculty members, affect the roles of learners. In this situation, the learner is in the foreground and active. The faculty members endeavor to facilitate learning.

Faculty members take a role in online learning environment. The most important role of instructor is to model effective teaching and learning. Instructors are responsible keeping discussions track, contributing special knowledge and insights, weaving together various discussion threads and course components, and maintaining group harmony in online learning environment (Rohfeld & Hiemstra, 1995).

### *2.2. Barriers to distance education*

Faculty members may come across some problems in distance education while preparing teaching-learning activities. Producing solutions to problems faced by faculty is very important for creation of an effective structure of distance education. Faculty members come upon some difficulties in transition to distance education and following teaching-learning process. Green, Alejandro and Brown (2009) underline some problems in distance education and online learning. These problems are as follows;

- the time and effort teaching online requires compared to face-to-face courses;
- the lack of financial compensation in comparison to work performed;
- the lack of institutional support;
- the lack of experience with online teaching;
- the lack of recognition for efforts made in online teaching;
- the lack of sufficient technological training.

Institutions should establish support structures to produce solutions to these problems. Especially technological support is an issue that should be emphasized in online learning environment for faculty members. Consistently new developments occur in the technology field therefore support of the faculty should be sustainable and up-to-date.

### *2.3. Faculty support*

Instructors are faculty members and they interact with learners in online learning environment. Instructors have different missions such as course content production, presentation, moderation, facilitation and evaluation etc. in online learning. Therefore, due to these processes that can be put to the workload of faculty members, institutions are responsible to remove the barriers. In this context Moller, Foshay and Huett (2008) emphasize that institution

should have a support system in place for faculty members such as a distance education center or department to overcome technological issues.

### 3. Problem Statement

What kind of technology-oriented contributions can be produced to the problems which faculty face in online learning environments?

### 4. Purpose

The main purpose of the study is to present distance education problems it faced faculty and determine technological solutions via related literature and experiences. In this context, this research can contribute determination of problems and produce to technology-oriented solutions.

### 5. Technology oriented efforts to support faculty

Different technology-oriented supports can be offered for faculty members in distance learning activities. In this situation, faculty needs are important and priority of institution mission is the determination of these needs. Afterwards, some solutions can be produced to these needs. Online environments are important context for teaching-learning activities in distance education. Web technologies are used in online environments and, the faculty should be supported with appropriate technologies in this environment. In this context, using of Learning Management System (LMS), the productions of online course content and virtual classroom software are examples for support.

#### 5.1. Use of LMS software support

Learning management systems play an important role for faculty participation in distance education applications. Support should be provided to faculty members by the use of learning management system software. This support should continue throughout the academic year for faculty. LMS software provides integrity for online course. However, this software may contain many different tools for preparing a learning environment. Course content tools, communications tools, evaluation tools, activity tools, student tools etc. are examples. Each tool has its own rules and characteristics in LMS. Detailed information about these tools and features to faculty members are difficult. Faculty members need to be supported about how they create an online learning environment in LMS. This support need contains below;

1. What is LMS software?
2. How it works LMS software?
3. How to use LMS software?

Faculty members may not be aware of the existence of a LMS system in their institutions. Priority mission is to provide information for faculty members. In this context, primarily an informative structure should be established about what is an LMS system. Afterwards, providing information about how these systems work and what kind of benefits they offer for faculty members are very important. At the final stage technology-oriented support can be offered. A comprehensive support service can be prepared about how to use these systems.

Technology-oriented support can be presented in different ways for faculty about LMS systems. These environments can be listed are in-service training courses, seminars, workshops, printed handbook, brochures, animations, videos and online help guides.

In-service training and seminars are support environments that can address a wide audience within the organization or institution. Thus, faculty are informed about the ownership of the LMS software as well as exchange of ideas throughout the organization on how to use the systems. Printed handbooks and brochures give a general

idea to faculty members. Preparation of videos and animations is more comprehensive support for effective online learning. This support contents can be submitted within DVD media as well as online environment for faculty members. Online guides are comprehensive source of information for instructors and they can access all the time.

### 5.2. *Production of online course content*

Production of course content for online environment is a general problem in distance education for faculty. In order to overcome this problem is basically two titles. These are:

- Transfer and conversion of existing contents for online environment
- New content production for online environments

Many faculty members have teaching materials of their lessons. However, many of these materials may not be suitable for online environments. In this case, these contents must be converted into the appropriate format to be presented in the online environment. Faculty support should be provided with technology-oriented solutions in this context. These course contents can be converted to appropriate formats for online learning with the support of technology experts.

Some contents are designed for printed media which need to be supporting transfer of the online environment. Similarly different video formats must be brought into to web environment. As a result, faculty members need technology-oriented support for conversion of course content to online learning environment.

Second title is production of new course content. In this situation online course content will be produced for the first time. This situation requires for comprehensive support need than the first title. Online courses need the instructional design methods. Course subject topics and content media are determined with instructional designer. Selection of software for preparation content media (video, animation, text, etc.) is important. Incorrect selection of tools causes loss of time and does not give the desired result. Faculty members can produce suitable content quickly with support of technology experts. Thus, appropriate content production can be ensured for online learning environment.

### 5.3. *Virtual classroom software*

Distance education use different technology to eliminate the distance between learner and instructor. In this context, interaction is important and there are some types of interactions in online learning environments. These are 1) same time - same place 2) same time - different place 3) different time – same place 4) different time – different place (Ngwenya, Annand, & Wang, 2004).

Virtual classroom software collects learners in online environment who are different locations. This software is a simulation of a classroom environment. Instructors can apply their teaching methods and classroom management rules in this environment. But classroom environment is physical place in traditional education. In the virtual environment, this situation is meaningless and instructors may encounter some difficulties. Primarily, instructors need support for design of a virtual learning environment. Instructors can take support from technology experts about virtual classroom design. Institution should provide support to faculty members in many points such as inserting learner names and teaching materials to this environment like file shares, tests and quizzes etc. This support service should be continuous and uninterrupted during online learning process. If instructors struggle technical problems, they cannot take their teaching roles. They undertake the role of technical support person. This situation makes negative impact on the creation of online effective learning environment.

Virtual classroom software includes different tools. Support department or center should provide a support to faculty about use of these tools. Thus, an effective learning environment can be created.

## 6. Findings and Discussions

Online learning environments are important area for distance education. Faculty's information and experiences should remain constantly up to date about the online environments. In this context, institutions should provide technology-oriented support to faculty members. This support should include not only what is it but also how the effective use of this technology. Technology information is not enough, however, a preliminary condition for support and important for faculty members to give a general idea. In the second stage, how to use these technologies for online learning environments is important. At this point, the creation of an effective learning environment has an important place in distance education. Related technologies can be used effectively teaching - learning activities. In this way, instructors take facilitator role for learners.

## 7. Conclusion

Institutions are able to generate solutions to problems faced by faculty. In particular, solution of the problems is important to transition to the online environment. Technology-oriented support structure should be built for faculty members to effective online education. Institutions should provide a sustainable support structure for faculty. Not only creation, but also sustainable situation of the support system is important. Information should be practical in the support system. Faculty member gain experience when support services solve their problems and permanent support is provided.

## References

- Gappa, J. M. (2008). Today's majority: Faculty outside the tenure system. *Change* , 40 (4), 50-54.
- Green, T., Alejandro, J., & Brown, A. H. (2009). The retention of experienced faculty in online distance education programs: Understanding actors that impact their involvement. *International Review of Research in Open and Distance Learning* , 10 (3), 1-15.
- Howell, S. L., Saba, F., Lindsay, N. K., & Williams, P. B. (2004). Seven strategies for enabling faculty success in distance education. *Internet and Higher Education* , 7 (1), 33-49.
- Moller, L., Foshay, W. R., & Huett, J. (2008). The Evolution of Distance Education: Implications for Instructional Design on the Potential of the Web. *TechTrends* , 52 (4), 66-70.
- Ngwenya, J., Annand, D., & Wang, E. (2004). Supporting asynchronous discussions among online learners. In T. Anderson, & F. Elloumi (Eds.), *Theory and Practice of Online Learning* (pp. 319-347). Athabasca: Athabasca University.
- Rohfeld, R. W., & Hiemstra, R. (1995). Moderating discussions in the electronic classroom. In Z. L. Berge, & M. P. Collins (Eds.), *Computer Mediated Communication and the Online Classroom* (pp. 91-104). Cresskill, N.J: Hampton Press.
- Turoff, M., Howard, C., & Discenza, R. (2009). Innovation and technology for 21st century education. In P. Rogers, G. Berg, J. Boettcher, C. Howard, L. Justice, & K. Schenk (Eds.), *Encyclopedia of Distance Learning Second Edition* (pp. 1189-1196). Hershey-Newyork: Information Science References.