FACULTY MEMBERS' VIEWS ABOUT OPENCOURSEWARE

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Abstract

In this research, it is aimed to determine the views of faculty members about sharing course materials on the web. Seven faculty members who published OpenCourseWare (OCW) are the participants of research. Participants are faculty members from two state universities in Turkey. This research attempts to find answers to these questions: "What are the general views of faculty members about OCW?" and "What are the views of faculty members about the process before, on and after adding OCW on the web?" This research is based on qualitative phenomenological research methodology. Qualitative data were collected via semi-structured interviews and questionnaires. The content analysis technique was used to analyze the data. Results were interpreted and described with direct quotations at the end of the analysis. According to results of the research, faculty members assessed that OCW increase the quality of education and bring new opportunities. Some faculty members prefer to add the existing course resources to the web without any modification. However the others prefer to modify the existing course resources. Faculty members support the use of OCW by others with proper citation. Faculty members also stated that OCW should be revised and updated, and students' demands should be taken into consideration.
Key words: *OpenCourseWare, open course materials, information and communication technology.*

Introduction

With the rapid dissemination of digital technology, learners' profiles changed in the 21st century. These learners live in a world surrounded by digital technology. Computers and the Internet are integral parts of their lives. Teachers have difficulties in teaching them via traditional methods (Prensky, 2001). In parallel with changing student profile, teachers need to use digital environments like blog, wiki, personal web pages as a learning environment. As a result of changing learner demands and reflections of technological development on education, there has been a shift from the teacher-centered to the learner-centered in education. In the teaching process, the question "how to transfer" has become more important rather than "what to transfer". In addition, diversifying educational resources, making them accessible easily, comparing them to improve, and sustainable lifelong learning show that technology integration into education is very important (Ozkul and Cagiltay, 2007). This viewpoint is parallel with sharing OpenCourseWare (OCW). In this research, in the light of technological developments, OCW, one of the changes occurring in education, is addressed.

OpenCourseWare (OCW)

OCW is a free and open web-based publication of high quality university level courses including syllabi, lecture notes, assignments, study materials and exams. OCW is accessible to anyone (OCW Consortium, 2010). OCW project was started by Massachusetts Institute of

Technology (MIT) in 2000 and MIT announced this project to the World via The New York Times newspaper in 2001. This project was first implemented in 2002 and 50 courses were published as pilot study. These 50 courses were translated to Spanish and Portuguese. 500 courses were published in 2003. All MIT courses were published virtually in 2007. The number of courses published reached 2000 in 2010 and there are 100 million visitors (MIT, 2010). Universities and other institutions that publish OCW established a consortium named "The OpenCourseWare Consortium". The OCW Consortium has a lot of members including hundreds of universities and associated organizations. The consortium serves as a resource for starting and sustaining OCW projects (OCW Consortium, 2010).

In Turkey under the leadership of The Turkish Academy of Sciences (TTAS), "Turkish Open CourseWare Consortium" was established. In 2010, 60 universities in the capacity of participant universities support Turkish OCW Consortium in Turkey. Five of the participant universities share their open course materials on the Internet. Turkish OCW Consortium is also a member of the OCW Consortium (Turkish OCW Consortium, 2010).

Open course materials can be shared to everyone via the Internet. OCW's fundamental purpose is that everyone can access courses and can freely view syllabi, videos, assignments and so on. There is no need to register to web site, too. But attendance to OCW or studying from OCW does not mean that you are the student of the university sharing its OCW and you will receive a certificate from that university (MIT, 2010). OCW can be classified as hree levels: Level 1. Course description information including syllabus, course calendar and so on. Level 2. Course content information including lecture notes, reading materials, answer keys, additional resources and so on. Level 3. Distance education material including self learning materials, interactive materials (Ozkul, Cagiltay, 2007).

Sharing course materials via web give learners opportunity to access and share information easily (Taylor, 2007), and provide learners time and location flexibility. In addition, it is believed that sharing course materials meet the information needs of increasing population and learners' demands. In this respect, faculty members who develop OCW have important responsibilities and tasks. In addition to developing resources for their face to face courses, they develop their course materials appropriate to the web. Because they are the publishers of OCW, their views about OCW should be researched.

Purpose and Research Questions

In this research, it is aimed to determine the views of faculty members about sharing course materials on the web. In line with this overall purpose, research questions are:
1. What are the general views of faculty members about OCW?
2. What are the views of faculty members about the process before adding OCW on the web?
3. What are the views of faculty members about the process on adding OCW on the web?
4. What are the views of faculty members about the process after adding OCW on the web?

Methodology of Research

Research Design

A qualitative phenomenological research methodology was used to describe faculty members' views about OCW. The fundamental question of phenomenological research is "What is the meaning, structure, and essence of the lived experience of this phenomenon for this person or group of people?" (Patton, 2002). Qualitative phenomenological research is a

research that brings out people's perceptions regarding a phenomenon, and their meanings attributed this phenomenon (Yildirim and Simsek, 2006).

Participants

Purposeful sampling method was used in selection of the participants of the research. In purposeful sampling method, researchers select participants intentionally to find out or understand the central phenomenon (Creswell, 2005). Seven faculty members who already published OCW are the participants of the research. Participants are faculty members from two state universities in Turkey. They participated in the research voluntarily. Participant features are given in Table 1.

Table 1. Participant features.

Participants	Age	For how many years they have shared OCW	Gender
Pilot	30	5	Male
1	29	5	Female
2	30	2	Male
3	32	7	Male
4	30	3	Male
5	32	5	Male
6	33	6	Male
7	30	7	Male

Researchers' Role

Researcher 1 is a PhD student in the Department of Computer Education and Instructional Technology. Researcher 1 took the course of "Qualitative Research Methods" in PhD program and participated in workshops about qualitative research. Researcher 1 has used OCW for two years. Researcher 2 is a PhD student in the Department of Computer Education and Instructional Technology. Researcher 2 took the course of "Qualitative Research Methods" in PhD program. Researcher 2 has used OCW for eight years. Researcher 3 completed her PhD in the Department of Computer Education and Instructional Technology. Researcher 3 instructs the course of "Qualitative Research Methods" and prepared workshops about qualitative research. Researcher 3 has used OCW for ten years. Researchers 1, researcher 2 and researcher 3 prepared interview questions together. Researcher 2 interviewed with faculty members. Researcher 1 and researcher 3 analyzed the data collected. Three researchers arrived at an agreement on data analysis.

Data Collection

Qualitative data were collected via semi-structured interviews and questionnaires. Interview questions were prepared by researchers. For the validity of the questions, five experts were consulted. Two of them were experts in the field of qualitative research, two of them were experts in OCW, and one of them was expert in the field of distance education. Necessary corrections were made after the experts' views. Pilot study was conducted with one faculty member who publishes OCW. After the pilot study, the interview form was finalized for application.

The participants of the research were seven faculty members. Semi-structured interviews were carried out with four participants. The audio taped, semi-structured interviews were held with participants separately in the place and at the time determined by each participant. The other three faculty members did not want to be interviewed. They wanted to write out their responses. So researchers prepared a questionnaire. The questionnaire consisted of open-ended questions that were the same with interview questions. Then questionnaires were sent by e-mail to three participants. Participants sent back their responses by e-mail, too. Data collection procedures and data types in the research can be seen in Table 2.

Table 2. Data collection procedures and data types in the research.

Participants	Date	Data type	Record type	Record time
Pilot	21.06.2010	interview	sound record	18 minutes
1	01.07.2010	questionnaire	text	-
2	30.06.2010	questionnaire	text	-
3	29.06.2010	questionnaire	text	-
4	29.06.2010	interview	sound record-a	11 minutes
5	29.06.2010	interview	sound record-b	17 minutes
6	30.06.2010	interview	sound record-a	10 minutes
7	30.06.2010	interview	sound record-b	19 minutes

Data Analysis

The qualitative data collected were analyzed through the content analysis technique by two researchers. Researchers' markings were compared. For the reliability of data, the formula, reliability = number of agreements / (total number of agreements + disagreements), was applied (Miles and Huberman, 1994). Since inter-coder reliability result exceeded .70, coding procedure was concluded as reliable. Findings were supported with direct quotations.

Results of Research

Themes and subthemes found out as a result of data analysis of faculty members' experiences with OpenCourseWare can be seen in the Table 3. There are four main themes: general views about OCW, views of the process before adding OCW on the web, views of the process on adding OCW on the web and views of the process after adding OCW on the web.

Table 3. Themes and subthemes as a result of data analysis.

General views about OCW
OCW definition
Environments for sharing OCW
Views of the process before adding OCW on the web
Content
Views of the process on adding OCW on the web
Views of the process after adding OCW on the web
Frequency of update

General Views about OCW

According to the results of interviews with faculty members who use OCW, two subthemes were found out under the main theme, general views about OCW. These are OCW definition and environments for sharing OCW.

OCW definition: Some of the faculty members emphasized the enhancement in the quality of education, collaboration between educators, the place and time flexibility, easy content update and free education place. One of them indicated that "OCW is open 7/24 on behalf of increasing the quality of education, and I consider that as collaboration between educators." (*Text, 01.07.2010*).

Environments for sharing OCW: Faculty members indicated that they mostly share OCW in the environments of Moodle, WebCT and blog. They also share OCW in the environment of private web pages. One of the faculty members expressed that "I share my OCW mostly in an environment which students can interact with each other. For this purpose, I generally prefer Moodle, WebCT or blog." (*Text, 29.06.2010*).

Views of the Process before Adding OCW on the Web

A subtheme, "content", was found out under the main theme "before adding OCW on the web".

Content: It can be said that views of faculty members about development of the content of OCW fall into two groups (Figure 1). Faculty members in the first group prefer to add the existing course resources to the web without any modification. However faculty members in the second group prefer to modify the existing course resources for the web even if just a bit. Faculty members in the second group expressed and emphasized that materials added on the web can be enriched by adding visuals, and different media, and examples about the topic to increase its comprehensibility. One of the faculty members in the second group expressed his opinion as that "We should not bother the target group, we are absent from web, they are alone… Comprehensibility of the content should be increased with visuals, videos, animations..." (*Sound Record-b, 30.06.2010*).

Figure 1: Views about design of OCW content.
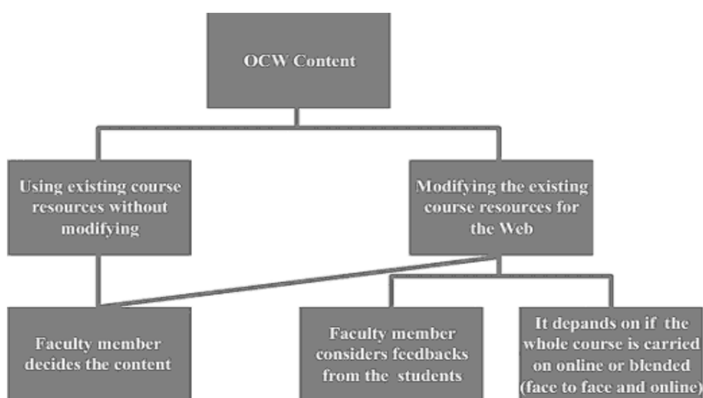
All faculty members in the first group expressed that they determine the scope of the content added on the web by themselves. Two of the faculty members in the second group emphasized the necessity that feedbacks from the students in the process should be taken into consideration and the content should be developed or modified according to these feedbacks. A faculty member who expressed this idea said that "At first, I decide the scope and the content,

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but later in the process I try to develop the content by taking the students' demands into consideration…" (*Sound Record-a, 30.06.2010*).

One of the faculty members stated that the content of the OCW should be determined according to whether the course is designed with absolutely an online method or a mix of online and face to face methods (Figure 1). And he said that "… You can share materials, which you used in the face to face class, on the web, and support students to benefit from these materials as they wish. But if the whole course is carried on online only, OCW should be prepared differently, because there is not a faculty member in such an environment. So the material should be prepared and designed for students to make use of it alone without difficulty." (*Sound Record-b, 30.06.2010*). Faculty members stated that they share course syllabus, academic calendar, course notes (documents and presentations), animations prepared for the course and video as OCW on the web.

Views of the Process on Adding OCW on the Web

Faculty members indicated that adding OCW on the web is not a difficult job, because OCW sharing environments are not complex, they are easy to use, and they do not require programming knowledge. However some faculty members also stated that if the private web pages are selected as a sharing environment, some problems may be encountered. A faculty member who expressed this idea said that "Adding OCW on the web is simple if we use Moodle. But sharing OCW on the private web pages is difficult, because at first we must develop web pages manually and we must solve system problems by ourselves. I think it is not a professional approach." (*Sound Record-b, 29.06.2010*). Faculty members generally indicated that experience is import at overcoming the problems.

Views of the Process after Adding OCW on the Web

A subtheme, "frequency of update", was found out under the main theme "after adding OCW on the web".

Frequency of update: Among the prominent benefits of sharing OCW, faculty members indicated that the content of the OCW can be updated easily and fast. A faculty member who expressed this idea said that "… For example, updating hard copy materials is more expensive and difficult. Updating on the web environment is much easier and everyone can reach the updated material instantly." (*Sound Record-a, 29.06.2010*). They also stated that OCW should be revised and updated at least once a year, dead links should be checked, and students' demands should be taken into consideration. In addition, faculty members stated that content of the OCW is also one of the factors that affects the frequency of update. A faculty member who expressed this idea said that "… the necessity of update in the contents, which change rapidly like technological innovations, is much more than the other contents which do not change much like history." (*Sound Record-a, 30.06.2010*).

Faculty members stated that OCW which is developed and shared by the faculty members can be used on the other documents only if the citation is written in the reference part. Besides faculty members thought that plagiarism won't be the big deal in the context of OCW sharing. A faculty member who expressed this idea said that "… If your sharing cannot be reached from everywhere and someone cannot get financial gain from your sharing, I don't think that plagiarism will be the big deal and your web site will be attacked." (*Sound Record-b, 30.06.2010*).

Discussion

In the current research, faculty members stated that OCW provides time flexibility. This result supports the result of the research performed by Arendt & Shelton (2009) who indicated that one of the greatest incentives for OCW use is "resources available at any time". In the

current research, faculty members indicated that OCW provides place flexibility. This result is consistent with the Fukuhara & Matsumura (2009)'s result that one of the professors sharing OCW stated that "*I would be most satisfied with knowing that some people, who live in a country where I would never visit in my life, use the information of my lectures*". In the current research, faculty members emphasized that OCW enhances the quality of education, and OCW provides collaboration between educators. These results are similar to Kursun & Cagiltay (2008)'s results which are "OCW increases quality of education" and "OCW increases collaboration between universities". In the OCW definition of MIT (2010), it is stated that "OCW is open and available to the world" and in the OCW definition of OCW Consortium (2010), it is indicated that "OCW is accessible to anyone". Parallel to these OCW definitions, in the current research, faculty members stated that OCW provides a free education place.

Faculty members share course syllabus, academic calendar, course notes (documents and presentations), animations prepared for the course and videos as OCW on the web. Thus, it can be said that faculty members prefer to share generally in the first level (course description information) and the second level (course content information) defined by Ozkul and Cagiltay (2007). And faculty members share in the third level (distance education material) rarely. In addition, it is an important finding that faculty members share OCW according to their own decisions and efforts in the first and second levels without getting help from any institution.

Faculty members mostly prefer Moodle, WebCT, blog environments for sharing OCW. The reason can be that when using these kinds of environments, they do not need to know programming language or any technical skills. They stated that if they share their OCW in these environments, it is not difficult to add OCW on the web and the content of the OCW can be updated easily and fast.

Conclusion

With the development of Information and Communication Technology (ICT), OCW, providing time and place flexibility, comes into prominence. In this context, views of faculty members about OCW are important. In this research, faculty members were asked to express their thoughts about the topics of general views about OCW, views of the process before adding OCW on the web, views of the process on adding OCW on the web and views of the process after adding OCW on the web. Parallel to related literature, faculty members stated that OCW provides time and place flexibility, and collaboration between educators. They also indicated that OCW also enhances the quality of education. One of the faculty members stated that content of the OCW should be determined according to whether the course is designed with an absolutely online method or a mix of online and face to face methods. And we think that this is a different and an important finding in the scope of the research. OCW, which is relatively new, will provide a big contribution to the world for the diffusion of knowledge.

Recommendations

In this research, data was collected from the faculty members who try to share OCW with individual efforts by the means of semi structured interviews and open ended questionnaires. In a further research, data may be collected from the faculty members or other partners who share OCW in an environment set up by their institution. Besides, suitability of OCW to the target population may be discussed by investigating the course content and course designs of OCW. There may be focus group interviews with experts about the design of OCW appropriate for the individuals with disabilities. Which sharing environments used by faculty members, who use the OCW as a support material, should be used may be determined by investigating the views of learners too.

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