TEACHING IN ONLINE COURSES:
Experiences of Instructional Technology Faculty Members

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ABSTRACT

The Internet and computer technology have altered the education landscape. Online courses are offered throughout the world. Learning about the experiences of faculty members is important to guide practitioners and administrators. Using qualitative research methodology, this study investigated the experiences of faculty members teaching online courses. A convenience sampling was used to select the instructional technology faculty members to investigate their experiences in online courses. Semi-structured interviews with faculty members teaching online courses were used as the primary source to collect data about the experiences of faculty members in online courses. Results of the study showed that faculty members' interest in using technology and the amount of time available to them for online course design affected the quality of online courses. The findings of this study also indicated that design quality of online courses is affected by the interest of faculty members to use the technology and the time that they can devote to planning, designing, and developing online courses. The poor design of existing online courses, high learning expectations of individuals from these courses, and the future of online courses are the concerns of faculty members. Higher education institutions should support workshops and trainings to increase the skills and interests of non-instructional design faculty members to design and develop online courses.

Keywords: Distance education; higher education; e-learning; experiences of faculty members.

INTRODUCTION

Today, computers and the Internet play roles unheard of when we were first introduced to these technologies. The Internet has been used widely in education for information sharing and communication purposes (Bishop, Giles, & Bryant, 2005). The Internet and computer technology have altered the education landscape. The Web has become an increasingly important medium for providing instruction in an electronic format (Ali, 2003; Ng, 2006). The effects of the Internet are observed in different settings particularly in the area of distance education.

Many institutions of higher education have adopted online education as the next logical step in educational delivery systems (O'Malley & McCraw, 1999). Online learning has become an important instructional delivery medium for universities (Akdemir & Koszalka, in press).

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Online courses are courses where students and instructors are separated by distance, and communicate with each other through the Internet. The changing nature of the student body seeking higher education was an important driving force for administrators of higher education institutions to adopt the online courses as an alternative to traditional face-to-face courses. The alterations in the work environment have made it necessary for individuals to learn new skills and information to keep them up-to-date.

Most of the time, attending face-to-face courses is problematic for many individuals who have difficulty to attend such courses on a regular basis because of time limitations. Sometimes distance can be a problem for individuals who have to travel to take courses. The number of students interested in participating in courses from a distance for convenience and for financial reasons is on an upward move (Frey, Faul, & Yankelov, 2003). Time and place flexibilities offered through online courses have made online courses popular for individuals looking for alternative learning environments. Therefore many higher education institutions have started to offer online courses in addition to their traditional face-to-face courses to respond to the high demand for a flexible leaning environment (Bruner, 2007). Software companies have developed many platforms for educational institutions to offer online courses. These platforms are called online course management systems with many features to facilitate teaching and learning over the Internet.

The enrollment rate in online courses is growing rapidly throughout the world since societies in many countries have moved from industrial age into the information age and there is a high demand for flexible learning environments (Kemp, 2006). As a result, faculty members are now faced with challenges such as designing, developing, evaluating, and managing courses over the Internet (McQuiggan, 2007). These are challenges considerably different from the challenges that they have been faced in years gone by.

The present study was thus conducted to investigate the experiences of faculty members in this transition. The primary purpose of this research, then, is to investigate the experiences of faculty members teaching online courses.

METHOD

A qualitative research methodology was used to conduct the study. Semi-structured interviews with faculty members teaching online courses were used as the primary source to collect data about the experiences of faculty members in online courses. Also, log_files which contain conversations in scheduled chat sessions were used as another data source to observe the experiences of faculty members in online courses. Permissions obtained from course professors and students to use chat log_files for the study.

Instructional Context The study was conducted in a higher education institute offering both online and face-to-face courses. Web-CT and Blackboard are used as online course management systems to deliver courses over the Internet in this institution.

Both course management systems are password protected and have similar features including chats, bulletin boards, course modules, assignment drop boxes, and course announcements to offer online courses.

Although graduate and undergraduate courses are offered in this institute, faculty members teaching only graduate level courses were used in this study to investigate their teaching experiences in online courses. Studied faculty members taught compulsory and elective graduate courses in this institution.

Participants A convenience sampling was used to select course professors to investigate their experiences in online courses. Four faculty members who were teaching online courses at the university located in the northeast United States were identified as participants for the study. All participants had a doctorate degree in instructional technology. Participating faculty members ranged from adjunct professors to professors. One participant was female and others were males. All participants were teaching three-credit graduate courses in the instructional technology department in the spring semester while the data were collected for this study.

Data Collection Procedure The university's course listing was used to identify course professors teaching online courses in the spring semester. Emails, and phone calls were used as a means to invite online course professors to participate in the study. Four faculty members showed interest in the study. Interviews were scheduled with these four faculty members who agreed to become participants. Semi-structured interviews were used to obtain the experiences of faculty members in online courses. All interviews were tape-recorded.

In order to observe the experiences of faculty members in online courses, log files containing scheduled chat session conversations were also used as a secondary source of data. Log_files were emailed to the researcher by faculty members teaching online courses for further analysis.

Analysis

Data analysis began upon the completion of the first interview. Each recorded interview was transcribed. Each interview transcript was reviewed by the researcher to identify new points raised by interviewed faculty members. Additional points raised by each faculty member interviewed were also asked to subsequent faculty members interviewed. In addition to the interview transcripts, researchers also used online chat log_files to identify additional points about the experiences of faculty members teaching online courses. Online chat log_files were used as observation data for this study. Transcripts, log_files, and reflective journals were examined to generate common themes and patterns. As a result of the analysis, three themes emerged.

FINDINGS

Design Quality of Online Courses
Teaching online courses requires new technical and instructional skills (Shank, 2005). All faculty members interviewed completed their doctoral degree long before online courses became popular. Therefore they did not themselves take any courses taught using online course management systems as graduate students. Some interviewed faculty members stated that they attended workshops to learn how to use online course management systems. Other faculty members, majority of whom have an interest in technology, learnt how to use online course management systems by reading tutorials and by trial and error. Literature supports the claim that instructors' technical ability is an important factor affecting the quality of online courses (McDaniel, 2004). Interviewed faculty members in this study have different level of interests in and skills to use technology.

When reviewing their online courses, it was observed that faculty members having more interest in the technology use enabled a higher number of features of the online course management systems in their online courses than that of faculty members less interested in technology. In the interview, faculty members with more technical skills stated that they had designed and developed their own online courses.

On the other hand, faculty members with less technical skills declared that they designed their own online courses but they received technical help from assigned graduate assistants to develop their courses on the online course management systems. Although amount of technical help received is different, all interviewed faculty members got some level of technical help from university's computing department to solve their technical problems throughout the semester regardless of their level of technical expertise. Technical help was provided to faculty members teaching online courses by university's computing services through emails and over the phone. Many institutions including such as the one exemplified in this study provide help to instructors so that instructors can convert their face-to-face courses to an online format and handle problems while online courses progress (Shank, 2005).

Another factor influencing the design of online courses is the age of faculty members. Literature on online learning indicates that older faculty members are a bit more resistant toward teaching online courses than their younger colleagues (Gerlich, 2005). Also, older faculty hold less favorable opinions on the learning experiences related to the online courses (Myers, Bennett, Brown, & Henderson, 2004). The data obtained from participating faculty members in this study provide little more explanation and show that not the age of the faculty members but their personal interests to learn and use technology is an important factor in talking about faculty members' resistance against teaching online courses.

One older faculty member interviewed in this study has more technical skills than his younger colleagues interviewed. When both faculty members' level of enthusiasm to learn technology is compared, it was observed that the older faculty member is more enthusiastic than the younger faculty member. As a result the older faculty member's online course contains features which provide students more opportunity to interact with other online students than the younger faculty member's online course. Literature indicates that online courses that integrate learning engagement with resources and social interactions are more likely to improve learning (Koszalka & Genesan, 2004).

Therefore online courses such as the one developed by the older faculty member exemplified in this study is more likely to improve student learning.

The design quality of courses is also affected by the rank of faculty members at the university. Faculty members interviewed in this study ranged from assistant professor to professor. Literature suggests that faculty members who are on the tenure clock would prefer not to spend extra time for the online course design since designing online courses eats away the time that they can spend for conducting research (Gerlich, 2005). It is a fact that designing online courses requires extra time.

Faculty members need to allocate time to visualize their face-to-face courses in a two-dimensional format and then develop their courses in online course management systems. No matter how much time is needed to design online courses, universities have expectations from faculty members regardless of their rank to teach their courses online. One faculty member explained university's expectation from faculty¹⁰⁰ members for online courses by saying that

> *"People for whatever reasons trade or state reasons are not comfortable ... that is the environment that they are really thrown into".*

Since all faculty members are expected to teach online, the amount of time that can be allocated by faculty members to online course design is greatly affected by their rank at the university. Tenured faculty members studied in this research seem to have more time to allocate for online course design than other faculty members do.

As a result, tenured faculty members' online courses are more technically advanced than others'. However, this can raise the question of whether technically advanced online courses represent the characteristics of quality online courses in their design. The answer is probably not because the quality of the content is sometimes over-shadowed by display of technology sophistication (Ali, 2003). Since all participants in this study were experts in instructional design, their courses fulfilled at least the minimum requirements of course design parameters. Nevertheless the level of features enabled in online courses allowing students to use more interactive features of online courses is considerably different in the tenured and non-tenured faculty members' online courses. Accordingly faculty members' position as tenured and without tenure affects the amount of time allocated to course design and consequently quality of their online courses.

Design and Teaching Time

Online courses are courses where most of the time faculty members need to provide all course materials in the online course management system by ensuring at the same time that all students understand materials and the intent of instruction in the same manner. Therefore development of online courses requires additional time for planning and designing to ensure the quality of online courses. Instructors prepare plans, design instruction, and sometimes develop materials for classroom-based courses. However, most of the course content in classroom-based courses is transferred to students verbally and using body language. On the other hand, course faculty need to organize all the content and teaching strategies well enough to eliminate the need to see the faculty in person in online courses. Thus, with the increasing role of online courses in higher education, the need for systemic thinking about how to implement online courses effectively is critical (Durrington & West, 2006). The time commitment because of the initial planning, design, and development time appears to be higher in online courses than in traditional face-to-face courses. Teaching online courses requires the use of systems and technologies that take effort to learn (Shank, 2005). The question is how much more time faculty members spend for planning, designing, and developing online courses than for classroom-based courses. Time spent to design an online course is explained by one faculty member who said, that;

> *"The disadvantages are for the instructor that the capital investment is not trivial and it is not I have found it little bit greater than traditional course but I think that is because I am new at it. So some efficiency come with more experience with online learning. The biggest disadvantage that I see this is from an instructor's perspective is that I work a lot more and a lot harder with the online course".*

Offering the same course would reduce the design time for faculty but as it was stated, capital investment to plan, design, and develop an online course is considerably higher than in traditional courses if the course is offered online for the first time. Offering the same course in subsequent semesters would probably require faculty members to do revisions rather than starting from the beginning to design the course so time to design online courses would probably drop. In another study, faculty members teaching online courses reported that using online environments required considerable

amounts of extra time for preparation so called "hidden work (Wolcott & Betts, 1999, p.35).

Designing online courses requires more time than designing classroom-based courses. What about after designing the course? Do faculty members spend same amount of time to offer online courses and traditional face-to-face courses? Responses received from faculty members indicate that they spend more time to offer online courses. One faculty member stated that:

> *"I would probably spend three times as much time in an online course than I do in a classroom classes".*

Another faculty responded to the question about the time he spends to teach online courses, and he identified the organization of the online courses and number of students taking the course as important factors affecting the time faculty spends to teach. He stated that:

> *"It is just in fact very much time consuming for the faculty. And this depends on the way courses are organized. It also depends on the number of students how the students are organized individually or group activities but by and large any online course you are applying to individual students or the sub-groups independently from other sub-groups which is not the same as the classroom where you speak to one sub-groups or individually but everybody is hearing and may be learning from there. So there is a penalty to pay repeating or duplicating the same thing over and over again........ I would say the time I spend for online courses between 2 or 3 times more per week as compared to the time I would spend teaching same course in a conventional manner".*

Participation in online courses requires a real commitment to the process (Palloff & Pratt, 2003). Teaching online will take more time and effort (Shank, 2005) and faculty members in this study emphasized that teaching online courses takes more time than conventional classroom-based courses. How could faculty members find extra time for online courses during the day? Probably the response of one interviewed faculty member will help to answer this question:

> *"In the online course, I am reading emails, sending emails and looking at the discussion boards at 5, 5:30 6:00 sometimes as much as half everyday. How tired I am I do that, and I do that seven days a week. Do I miss a day here or there? Absolutely but it becomes routine that I do like showering and brushing my teeth everyday. I am checking in.*
>
> *When I go home as soon as before I eat dinner I am online again. And after the dinner I am online again. And on the weekends I check I have road runner at home and I sign on 2-3-4 times a day. Because I want to make sure I am not going to make students wait for me, wait for a response. There are times that I do not keep up with that pace. But I find and I found the last time I offered the course that I am tired. It is always on my mind. And students told me the same thing and think it is a fair play.*
>
> *But I cannot relegate it to one afternoon it is always in my mind when I am at home. Not at work because the work is pretty fast pace. But when I am home I am thinking about the course constantly. And high speed internet is always up and running. It is pretty intense. It is pretty intense".*

Does it make any difference in terms of the time faculty members spend to teach online courses if they have taught the course before? Do they gain experience or time management skills to reduce the online course teaching time? One faculty member's response who has taught online courses for several years illuminates these questions.

> *"Leading a classroom that you have already taught before is time efficient for instructor. Leading an online course even when you taught online before several times takes more time".*

Personal experiences of interviewed faculty members teaching online courses indicated that online courses take more time than traditional classroom-based courses for faculty members in terms of planning, designing, and developing. Results also indicated that faculty members spend more time to teach online courses during the semester than face-to-face courses, and teaching the online course before, even several times, does not help faculty members to reduce teaching time in subsequent online courses.

Effectiveness of Online Courses

Reviewing sixty years of research, Clark (1983) concluded that media is just a vehicle to deliver instruction and it does not influence student learning. When online courses become part of the higher education, there were some concerns about their effectiveness, since students and teachers are separated by the distance and have to communicate via computer technology over the Internet. Even today, faculty members express their fear about the effectiveness of online courses as compared to classroom-based courses (Shank, 2005). However studies particularly on online learning and distance learning in general showed that online courses are at least as effective as classroom-based courses in terms of student learning (Minotti & Giguere, 2003; Simonson, Smaldino, Albright, & Zvacek, 2003). When the question about the effectiveness of online courses in terms of student learning was directed to one interviewed faculty member, he stated that:

> *"I think there is difference with regard to effectiveness student learning I actually think students might be learning more in my online classes than face-to-face. The quality of the discussions in the all courses I taught is typically much much better. For the papers are about the same. I think there ought to be some benefits more involved more sophisticated discussions. Probably more students learning certainly not less but more time required on my part".*

The response of a faculty member indicates that he believes that student learning in online courses seems to be at least as good as student learning in classroom-based courses. One can ask the question of whether all online courses are effective or the organization of the course has any effect on student learning. Another faculty member's response illuminates this question.

> *"And my own conviction from experience of courses, if the course involves critical thinking involves deep analysis of concepts involves of sharing opinions and critiques of other peoples' view points. Asynchronous environment is more effective than the conventional classroom situation. It is not the second best. We have something vastly superior what we have been doing in centuries in classrooms. If you want to motivate students get group confesses get people to buy the idea and then the group classroom environment is possibly superior. If we want to demonstrate the way of doing something again may be doing it in the classroom to everybody is not adequate enough.*

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> *If you want to trouble shoot it we do not get a chance of in the classroom environment because there is a time limit and there are too many people to deal with individually. So we spend more time in an online classroom but we do deal individual issues, problems. If it is group conceptual things we can also share ideas in a much more effective way".*

Individual attention given to each student in online courses seems to affect the level of student participation also. One faculty member stated that:

> *"I honestly think that I get deeper level of conversations in online courses and I think the participation is much higher level than in my classroom courses".*

Studied faculty members indicated that based on their own observations, online courses are at least as effective as classroom-based courses in terms of student learning. It seems that online courses, especially the ones requiring deeper analysis of concepts, and the use of the discussion feature of online courses are more effective for increasing student participation (Deal, 2002) and promoting student learning. Students in online courses have to think, respond, use critical reasoning, and interact with each other and faculty to complete online courses (Minotti & Giguere, 2003). Therefore online courses may provide more leaning benefit for students especially when courses requiring critical reasoning are taught online.

Concerns of Faculty

Many higher education institutes offer online courses. However, faculty members have several concerns about online courses. In the present study a question was directed to the interviewees to learn about their concerns regarding online learning. One faculty member pointed toward the design quality of courses offered online. She said;

> *"I think for my self I have training in designing instruction and I have worked with online leaning for a long time. I get very concern about other online courses that I see people are not trained. They think that online courses putting up a syllabus and instructions to write paper and once in a while you send a paper in. so I think there are definitely some issues of quality of instruction".*

Knowledge about instructional design seems to be an important competency for online course instructors to design quality online courses.

Posting course syllabus and course content is not adequate to design and develop online courses so faculty members should be trained about online course design before they start offering any courses online. The use of technology seems to be an issue and another faculty said that:

> *"There are issues in terms of the technologies that are available and how they are being used. I think we were back into the same issues that we thought back of the 1970s and 80s about multimedia development. Because it has bells and whistles lets put it in there is no instructional intent we see this same thing in distance education. Guess what I can put quizzes in. I can put video clips and I can put this and that. There is no instructional thought behind it. Just put it in that concern me because a lot of stuff can confuse students. So my courses are probably more bare bone than some. I put a lot of thought in to the instructional design and I think that concerns me that a lot of distance education is going on is not well thought in terms of what you are trying to accomplish.*

> *I think there is also a lot of effort to take what exist in the classroom and make it the same in online environment".*

Another faculty member's concern about the design quality of online course moves the topic into a different dimension.

> *"....we want to maintain the quality. My concern is that online course not to be held to a different or higher standard than the face-to-face courses. The tendency is actually hold the online courses to higher standard, which I think is wrong. We are not in most people classroom courses looking to see what teachers and students are doing why we want to scrutinize online courses even more than face-to-face course is not completely clear to me. Although they should be quality courses, I think they should be held same standards for quality not different standards...".*

Expectations from online courses in terms of the course quality appear to be higher in online courses than from conventional face-to-face courses. Individuals probably approach any technology-based educational interventions in the same manner and have the expectation that technology will increase student learning.

One faculty member's response illustrates some similarities between the online courses and other technology-based educational interventions in terms of student learning expectations and takes a radical stand to make predictions about the future of online courses. He stated that:

> *"The concern is I think because it more time consuming a break of paradigms and customs and habits of teaching profession. There is no guarantee that it is going to actually survive and be sustainable in a large scale just like other technologies like educational television did not delivered potentially could have because of its problems and fitting into the system as the system is organized and my concern is we have another bubble which is e-learning is going to burst. Everyone is going to be dissatisfied and 5 – 10 years from now we will write about e-learning as a mistake.........a baby and bathroom syndrome meaning every generation teachers, administers and, researchers find some faults or something in the system and they reorganize and throw out every thing is good in the process. They cure one problem and create ten new ones and progress never achieved in reality. If that was true when it was true in 1920, it is just true in 2020. That is the problem".*

Concerns of faculty members interviewed mainly concentrate on the design quality of existing online courses, and learning expectations from online courses. Systemic design of any courses including online courses offers such benefits including identifying and understanding the needs of students in order to develop courses that meet students' needs and enhance their opportunities for success (Durrington & West, 2006).

Technology has no influence on students learning but any increase on student learning can come from the teaching method built into the use of technology (Clark, 1994).The environment should not be used as a criterion to assess the effects of student learning rather quality of instruction used in the environment should be considered.

DISCUSSION AND CONCLUSION

Online courses are a growing trend. Online learning takes learning beyond the restricting walls of the schools (Ali, 2003). The changing nature of students on campuses triggered the spread of online courses. More and more adult non-traditional students can be seen on campuses who have full-time jobs and family responsibilities besides taking courses. Online courses provide opportunities for these types of students to learn at convenient times and places and at their own pace (Deal, 2002; Perrin & Mayhew, 2000). The findings of this study are important to illuminate the experiences of instructional technology faculty members teaching online courses.

The results of this study showed that design quality of online courses is affected by the interest of faculty members to use the technology and the time that they can devote to planning, designing, and developing online courses.

Higher education institutions should support workshops and trainings to increase the interests of faculty members to use technology on campuses. Similar initiative should be considered for teacher training programs since there has been an increasing interest in e-learning in teacher training at universities in the last decade (Yucel, 2006). Teacher training programs should offer courses for online course design to educate teachers since our future depends especially on teachers (Baran & Cagıltay, 2006).

Also considering the extra time needed to design effective online courses, administrators of K-12 and higher education institutes should make schedule adjustments to provide extra time for educators teaching or planning to teach online courses for course design and development.

Besides the design quality of online courses and the extra time needed for them, faculty members also indicated several concerns about online courses. The poor design of existing online courses, high learning expectations of individuals from these courses, and the future of online courses are the concerns of faculty members. Administrators should set standards for online course design to ensure the quality of online courses (Ali, 2003) and learning expectations should be similar to courses delivered through other media. The future of online courses will be different from previously tested educational interventions such as educational television.

The demand for distance learning and the availability of the Internet made online courses popular is not the belief that technology itself alone would improve student learning. Thus the future of online learning appears to be different from any other technology-based intervention tested before.

This study provided experiences of instructional technology faculty members teaching online courses. As the technology especially the Internet continues to become part of our daily lives, learning and using technology will become a routine, not just a matter of the exceptional personal interest. Studies similar to this one should be conducted to observe the trends and patterns emerging from the experiences of faculty members teaching online courses over the years.

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REFERENCES:

Akdemir, O., & Koszalka, T. A. (in press). Investigating the Relationships Among Instructional Strategies and Learning Styles in Online Environments. *Computer & Education Journal*. Retrieved May 7, 2007, from http://www.sciencedirect.com

Ali, A. (2003). Instructional Design and Online Instruction: Practices and Perception. *TechTrends, 47*(5), 42-45.

Baran, B. & Cagiltay, K. (2006). Teachers' Experiences in Online Professional Development Environment, *Turkish Online Journal of Distance Education-TOJDE, 7* (4).

Bishop, D. C., Giles, S. M., & Bryant, K. S. (2005). Teacher receptiveness toward web-based training and support. *Teaching and Teacher Education, 21*, 3-14.

Bruner, J. (2007). Factors Motivating and Inhibiting Faculty in Offering Their Courses via Distance Education, *Online Journal of Distance Learning Administration, 10* (2).

Clark, R. E. (1994). Media will never influence learning *Educational Technology, 42*(2), 21-29.
Deal, W. F., III. (2002). Distance Learning: Teaching Technology Online. Resources in Technology. *Technology Teacher, 61*(8), 21-26.

Durrington, V., & West, R. (2006). The Distance Learning Division and Systemic Change. *TechTrends, 50*(2), 20-21.

Frey, A., Faul, A., & Yankelov, P. (2003). Student Perception of Web-assisted Teaching Strategies. *Journal of Social Work Education, 39*(3), 443-449.

Gerlich, R. N. (2005). Faculty Perceptions of Distance Learning Retrieved April 05, 2006, from http://www.magnapubs.com/pub/magnapubs_der/9_17/news/597900-1.html

Kemp, J. E. (2006). Foundations for Systemic Change *TechTrends, 50*(2), 20-21.

Koszalka, T. A., & Genesan, R. (2004). Designing Online Courses: A Taxonomy to Guide Strategic Use of Features Available in Course Management Systems (CMS) in Distance Education. *Distance Education, 25*(2), 243-256.

McDaniel, S. (2004). Which instructor variables affect course quality? . Retrieved April 04, 2006, from
http://www.magnapubs.com/pub/magnapubs_oc/4_8/news/596575-1.html

McQuiggan, C. A. (2007). The Role of Faculty Development in Online Teaching's Potential to Question Teaching Beliefs and Assumptions, *Online Journal of Distance Learning Administration, 10* (3).

Minotti, J., & Giguere, P. (2003). The Realities of Web-Based Training *T.H.E. Journal, 30*(11).

Myers, C. B., Bennett, D., Brown, G., & Henderson, T. (2004). Emerging Online Learning Environments and Student Learning: An Analysis of Faculty Perceptions *Educational Technology & Society, 7*(1), 78-86.

Ng, C. F. (2006). Academics Telecommuting in Open and Distance Education Universities: Issues, challenges, and opportunities. *The International Review of Research in Open and Distance Learning 7*(2). Retrieved November 1, 2007 from:
http://www.irrodl.org/index.php/irrodl/article/view/300/632

O'Malley, J., & McCraw, H. (1999). Students Perceptions of Distance Learning, Online Learning and the Traditional Classroom [Electronic Version]. *Online Journal of Distance Learning Administration*, 2. Retrieved May 02, 2006 from
http://www.westga.edu/~distance/omalley24.html

Palloff, R. M., & Pratt, K. (2003). *The Virtual Student. A Profile and Guide to Working with Online Learners. The Jossey-Bass Higher and Adult Education Series.* California.

Shank, P. (2005). 5 Common Fears about Teaching Online—Fact vs. Fiction Retrieved April 20, 2006, from
http://www.magnapubs.com/issues/magnapubs_oc/5_10/news/598041-1.html

Yucel, S. (2006). E-Learning Approach In Teacher Training, *Turkish Online Journal Of Distance Education-TOJDE, 7* (4).