

The Need for Pedagogical Change in Online Adult Learning: A Distance Education Case in a Traditional University*

Uzaktan Eğitim ile Öğrenmede Pedagojik Değişim İhtiyacı: Geleneksel Bir Üniversitede Yürütülen Uzaktan Eğitim Çalışması*

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Abstract

The need for providing opportunities for those who seek for advancing his or her knowledge and skills on different subjects while they are away from campus has been a requirement of the era we live in. Thus, the diffusion of distance education concept among educators and use of related technologies in many campuses has been growing. Although different advanced technologies are available for preparing and delivering content online, the important question on how to use these technologies still remains unanswered. Literature on the subject recommends that having access to technology itself does not produce desired outcome, unless it is supported with appropriate pedagogical approaches.

This study, therefore, was designed to investigate pedagogy of teaching and learning online from adult students' perspectives. Specifically, to understand pedagogical factors that impact student understanding of the content online, how adult students in an online program assess pedagogical approaches represented by course instructors, weaknesses they have experienced and ideas what would be done in terms of pedagogical approach so that adult learners learn better in online environments. Participants stressed on the importance of pedagogical planning and implementation strategies. Among those issues, planning before teaching, social presence through interactions, and feedback mechanism are mostly indicated issues necessary for effective teaching and learning online.

Keywords: Pedagogy in distance education, adults' online learning experiences, dynamics of teaching online

Özet

Bilgi çağının bir gereksinimi olarak çalışan veya herhangi bir sebepten dolayı geleneksel eğitim kurumlarından uzak olan bireylerin ihtiyaç duyduğu güncel bilgiye erişim ihtiyacına cevap vermek artık bir zorunluluk haline gelmiştir. Bilgi

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İletişim teknolojilerinde meydana gelen gelişmeler her ne kadar eğitimcilere fırsatlar sunmakta olsada, bu teknolojilerin öğrenme ve öğretmen faaliyetlerinde nasıl kullanılması gerektiği, uygun pedagojik yaklaşımların neler olabileceği cevaplanması gereken bir sorun olarak beklemektedir.

Bu çalışma, verilen sebeplerden dolayı, özellikle uzaktan eğitim faaliyetlerinde pedagojik dinamiklerin neler olabileceğini yetişkin öğrencilerin tecrübeleri ile incelemek üzere yürütülmüştür. Bu bağlamda, öğrencilerin uzaktan eğitimde öğrenme üzerine genel görüşlerinin yanı sıra hangi unsurların önemli olduğu tartışılmıştır.

Katılımcılara göre başarılı bir uzaktan eğitim faaliyeti için pedagojik bir planlamanın ve bu planın hayata geçirilmesi ile ilgili bir takım stratejilerin dikkate alınması gerekmektedir. Bunlardan en önemlileri, öğretim öncesi iyi bir pedagojik planlama (tasarımın) yapılması, öğretim faaliyetinde bulunan öğretmen ve öğrencilerin sistem içerisinde var olduklarını hissettirmeleri, ve öğrencilerin öğrenmeleri ile ilgili bir geri beslemeye dikkat edilmesi gereği vurgulanmıştır.

Anahtar Kelimeler: Uzaktan eğitim ve pedagojik unsurlar, Yetişkinlerin çevrimiçi öğrenme tecrübesi, Çevrimiçi öğretimde temel dinamikler

I. INTRODUCTION

There is no doubt that the use of information technologies, particularly computer-based technologies, in education has increased dramatically and that increase has brought new opportunities to enhance teaching and learning (Baldwin, 1998; Bransford et al, 2000; Papert, 1980). However, studies in the related literature discuss that efforts of few decades have produced little or no change in education as compared to changes in other domains of daily life (Cuban, 2002; DeBell & Chapman, 2003; Franklin, Turner, Kariuki, & Duran, 2001; Schrum, 2005; Spotts, 1999). People in given time period have changed their banking behaviors, entertainment styles, communication tools and so on. The close investigation of this change process reveal, at least for many of us individually, that the resistance to change or adoption of technology has not been so difficult as it has been in education. Although technology in areas as we cited some above have become an indispensable part of the process, it is not so clear to see this picture or the same speed of the adoption trend and its impact in education. Although educators have agreed on the fact that information technologies have potential to transform teaching and learning, they cautioned that only if it is used appropriately (Koehler, Mishra & Yahya, 2007).

Among many ways of technology use in education, distance education (DE) is one particular approach that has been growing rapidly among educational institutions and educators. The need for providing opportunities for those who seek for advancing his or her knowledge and skills on different subjects while they are

away from campus has been a requirement of the era we live in. Thus, the diffusion of DE concept among educators and technologies in many campuses has been growing. Parallel to the adoption rate of DE in the world, it has also been popular subject in Turkey (Geray, 2007; İsmail, 2008, Yalın, 2008). Many institutions have initiated DE programs in recent years. The institution the current study is carried out was one of those institutions that has just established its DE structure and initiated a very large project for more than four-thousand adults who work in the field of health. The current study was carried out with participants of this project.

Although different advanced technologies are available for preparing and delivering content online, the important question on how to use these technologies still remains unanswered. Literature on the subject recommends that having access to technology itself does not produce desired outcome, unless it is supported with appropriate pedagogical approaches (Pamuk, 2011). The theoretical discussions as provided in the next section suggest that teaching a subject matter is a complex process that requires teacher considers different components (i.e., content, context, classroom management, pedagogy of teaching and learning) of teaching and learning (Shulman, 1986).

In this study, we have investigated adult students' online learning experiences and conceptualized fundamental principles of online pedagogy of teaching adults from learner perspectives. Given the size of the project and the complexity of technology integration process, we believe that the discussions in this study will provide some insights for those who are or plan to be part of DE project at this scale. Experiences on teaching and learning at distance as well as pedagogical experiences will be provided.

II. THEORETICAL FRAMEWORK

Educators demonstrate a strong consensus on the need for integrating technology into education. However, they differ on the process for implementation and outcomes. The early implementation results have revealed that the impact of technology on teaching and learning has not been reached to the desired level of success (Cuban, 1998, 2002). Parallel to what Cuban criticized, results pointed out that increased access rate to technology and internet has not produced any remarkable change as expected. Several factors and reasons have been discussed and solutions offered as a remedy in the literature. Although there may be different ways in literature for addressing issues with regard to use of technology in education, we prefer to focus on pedagogical use of technology in this study.

Among different proposed solutions, one specific approach, Technological Pedagogical Content Knowledge (TPACK), gaining attention of educators has been selected as a theoretical framework to assess students' online learning experiences. TPACK framework provides holistic framework to conceptualize how pedagogy and technology should be used together to teach content according to students' learning needs (Harris, Mishra & Koehler, 2009). According to TPACK, effective

technology use depends not only on technology and use of it, but content, pedagogy, technology and interrelationships of these concepts (Angeli & Valanides, 2009; Koehler, Mishra & Yahya, 2007; Mishra & Koehler, 2006). Based on Shulman's (1986) Pedagogical Content Knowledge model, Mishra and Koehler (2006) redefine it and add technology component to the model. In the essence of the model, technology integration is defined as a different and new knowledge base developed from content, pedagogy, technology and their interactions.

In TPACK model, teachers need to go through a systematic process of deciding what to teach, gain knowledge and experience on how to teach, be aware of context conditions during the teaching and finally think about if technology supports teaching of that specific content, pedagogy in the chosen context (Pamuk, 2011). Although TPACK provides a detailed framework to examine technology integration we do only focus on pedagogical implications of the model on teaching and learning online. In other words, we would like to study how pedagogical preferences and approaches in given context impact learners' overall satisfactions about learning online. Studies on TPACK carried out in different context (Baran, Chuang & Thompson, 2011; Chai, Koh & Tsai, 2010; Koh, Chai & Tsai, 2010; Pamuk, 2011) reported that the impact of pedagogical beliefs, approaches or practices on development of TPACK is crucial. Therefore, we believe that the result of this study would provide some insights about the important aspects of pedagogy of teaching and learning online.

In our context as given in the research context section in details, approximately eleven academic personnel has taught five courses to about 4000 adult students. This is the first experience of instructors as well as of majority students teaching and learning online. Therefore, the pedagogical approaches of each instructor and the way how they implemented with technology has been important component of the overall program. Considering students' limited access to instructors and to resources available in traditional classroom, the way of blending pedagogy and technology become a key factor in the success of program and obtaining desired outcomes. TPACK framework in this study has made it possible for us to define, first of all, what effective or meaningful technology integration is, and how to assess its outcomes. Through lenses of TPACK, we tried to understand what pedagogical factors impact student understanding of the content in online LMS context. More specifically, to understand what pedagogical factors works and what do not work for teaching and learning online from learner perspectives.

III. PURPOSE OF STUDY

The main purpose of the current study was to investigate pedagogy of teaching and learning online from adult student perspectives. Specifically, this study sought to understand pedagogical factors that impact student understanding of the content in online LMS context, how adult students in an online program assess

pedagogical approaches represented by course instructors, weaknesses they have experienced and ideas what would be done in terms of pedagogical approach so that adult learners learn better in online environments. To accomplish this purpose, following research questions were created;

1. How do adult learners evaluate their online learning experience?
2. What are the main components of effective pedagogical approach in online learning environments from adult learner perspective?
3. What would be done differently from learners' perspectives to improve pedagogy of teaching and learning online?

IV. RESEARCH METHODOLOGY

In this study, mixed method research approach was used to accomplish the purpose of the study. The data collected from different sources were analyzed with qualitative and quantitative techniques. As indicated in the literature, mixed method is defined as “the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study” (Johnson & Onwuegbuzie, 2004). In other words, mixed method is “the natural complement to traditional qualitative and quantitative research”. In this research method, research collects both qualitative and quantitative data as needed (Creswell, 2003).

While qualitative research approach provides researcher opportunities and flexibility to investigate the issue from different perspective in details (Glaser & Strauss, 1967; Merriam, 2002), quantitative tools and approach provides include thoughts and experiences of such an large group of participants and analyze the data from different perspectives. Within the consideration of the research context where learning and teaching take place, two major primary data sources were used to collect data. First, interactions, discussions among students, questions to instructors and to other students in the online forum sections in the LMS were one of the major data source. In addition, based on the emerging themes from initial analysis of the data from online forums and communications, a questionnaire with 17 questions of which 7 were open-ended type were developed by researcher and distributed to participants through an online surveying system.

Due to large number of participants and their physical locations distributed to the around the country, there was a need to get their ideas through an online questionnaire instrument. To have detailed grasp of participants ideas we prefer to compose an instrument that allow participants to share their thoughts and experiences freely. Therefore, we created an instrument with two types of items: likert type items to get background information about participants and open-ended items as given above.

In addition to those two data sources, because of the position of researcher in the project, e-mails, phone conversations with students, one-to-one and as well as group meeting with instructors would be listed as secondary data resources.

4.1. Research Context

This study was carried out in the context where four thousand adult students from almost all cities of Turkey enrolled to an online program. A state-funded university located in the black sea region in Turkey has initiated an online degree program for individuals who work in the health field. This program was intended to improve participants' educational level and provide them an opportunity to earn four-year college diploma. All participants in the program had two-year community college diplomas and have been working in the field for years. This study has been carried out with the students of the first year in the program.

To accomplish the goals, technical infrastructure were established and Moodle LMS was installed to distribute online content to students, establish communication between students, and instructors as well as among students. Every week students were provided content in different formats. Video streaming with synchronized presentation lecture for the week, hand outs, MP3 audio files of the lecture were some of the teaching materials every week students receive through the LMS system. Students were provided online forums and time to ask questions to instructors and share their thoughts with other students and with instructors.

4.2. Data Analysis

Before all, qualitative data were analyzed based on inductive approach principles. This approach is described as the way looking at the data and developing general principles about the subject, listing general themes from data. In the current study, researcher read all postings in the online forums and responses to the questions in the online questionnaire and code important data and then develop general themes emerged from the codes in the initial step of the data analysis. This stage actually was ongoing process that started in the beginning with early data comes in and continued till end of the research. Based on the initial data analysis results, a questionnaire were developed and implemented. The data come from the questionnaire instrument was analyzed in both quantitative and qualitative nature. Some statistical procedures were employed to investigate the data from questionnaire. As noted earlier, the questionnaire was composed of two types of items (multiple choice and open-ended). Open-ended responses (Q11-Q16) were coded by researcher according to criteria developed by the researcher based on the initial responses. Researcher, then, read through each response and coded them accordingly. One open-ended question (Q17- *How would you teach the course in the program if you were teacher, what would you do differently?*) was not coded as planned due to wide variety of responses. But, these responses were used qualitatively by researcher to support overall analysis. Although coding process was

a heavy and time intense process, it was useful in terms of having a deeper understanding of the participants' experiences.

V. RESULTS

5.1. Descriptive Information and Participants' Backgrounds

Approximately four thousand adult students participated to the study in different ways. Although some only provided data in discussion forums, some others took the online questionnaire. Total 17 weeks of online postings in forums and one thousand and six hundred twenty-five (1625) responses to questionnaire were gathered and analyzed.

Table 1. *Descriptive statistics about participants*

Q1 (Num. of Years l
Q2 (Currently Empl
Q3 (Age)
Q4 (Computer and I
Q5 (Active E-Mail U
Q6 (Internet Use for
Valid N (listwise)

Overall, analysis of the data revealed that majority of the participants answered the Q3 in the questionnaire were adults with the average age between 31 and above (98%, Age range 1: 20-25, 2: 26-30, 3: 31-35 and 4: 40-Above). More than 99% of the students had a job during the study (Q2, 1: No Job, 2: Had Job), and about 83% of the participants reported that it was 11 or more years past since the their last graduation of a school (Q1, 1:1-5, 2:6-10, 3:11-15, 4:16-more). Ninety-three percent (93%) of the participants reported that they had home computer with internet connection (Q4, 1: Had internet access, 2: No internet access). In terms of students' use of internet and e-mail communication, 86% of the participants reported that they had an actively used e-mail account (Q5), and Ninety-six percent of the participants use internet daily basis to read news, send e-mails, and similar activities.

With regard to usefulness of providing materials in different formats (i.e., mp3, video, pdf etc), eighty-eight percent of the participants found it useful (Q7). In addition, only fourteen percent of the students (14%) mentioned having previous DE experience (Q8). While fifty-eight percent of the participants reported that they log into the LMS system daily basis, only three percent log in few times in a month (Q9).

Participants were also asked whether they use discussion board provided them to instructors and other students to exchange knowledge and experiences. Seventy-five percent of the participants reported that they had used discussion boards (Q10).

Table 2. *Descriptive statistics about participants' thoughts on Q7-Q10*

Q7 (Usefulness of I Formats)
Q8 (Having Previou
Q9 (Frequency of L
Q10 (Use of Discus
Valid N (listwise)

Based on the analysis of the data, adult learners' thoughts on DE and pedagogic issues they report are categorized into different groups.

5.2. Thoughts on Learning through Distance Education

In the second section of the survey, we intended to collect some data about participants' thoughts on learning through DE system. For this purpose, 7 open-ended questions were created and participants' responses to those questions were coded by researcher so that they can be analyzed with statistical techniques. In addition to the statistical results, quantitative data results were also provided.

Based upon participants' discussions on the online forums in the early weeks of the program, we asked participants in the questionnaire to compare and contrast traditional classroom settings and DE in terms of their effectiveness on the learning (Q11). Participants' responses were categorized and coded ((4) absolutely traditional classroom effective, (3) traditional classroom effective, (2) DE effective, (1) absolutely DE, (0) No difference). The results show that 67% of the participants (N=1090) responded to the question.

Table 3. Comparison of learning at traditional classroom versus DE (Q11)

	DE Effectiveness
	Trd. Classroom
	Absolute Effective
	Total
Missing	System
	Total

Among those responded, about eleven percent mention that learning in DE setting was effective to them. Although 11% indicate no difference in learning online or at classroom, the majority (79%) seems to favor learning at the classroom settings. Among several differences or reasons between DE and Classroom, the participants mostly cited following ones.

- **Timely Interaction:** This is one of issue mentioned by majority of the participants. They briefly point out that it is important to have interaction with instructor at the time teaching takes place so that they can find answer to their question that may arise. Otherwise, learning would be difficult and postponed in asynchronous communication.
- **Time Management:** Participants reported that being a full-time employee and some other duties at home make it difficult for them to find appropriate time to login to the system and study. Therefore, they reported that they couldn't keep up with the readings and other duties required in the program. In tradition classroom setting, they indicate, there are no other things to do at the time. Your task is to be in the classroom at given time period.
- **Student Responsibilities:** Participants indicated that in DE setting students face several responsibilities that may not be at the classroom settings. For example, planning, studying, researching and contacting instructor etc. Participants stress that the duties in the classroom setting is much lighter than that those of in DE setting.
- **Reinforcements and Motivational Dynamics:** Participants also mentioned about some of the factors that reinforce them to concentrate on the learning activities. According to participants, for example it is important for them to confirm their understanding of the subject from instructor. Confirmation motivates them to continue studying with some comfort. However, due to limited interaction with instructor in the asynchronous communication type, students feel some worries whether or not they understand complex

subjects. Therefore, in brief, participants seek for some activities that motives and reinforces them in DE setting.

Among those participants who indicated having previous DE experience also reported similar results as given in Table 3 above. Although there is an increase about 3% in effectiveness of DE, the effectiveness of traditional classroom on learning is cited by majority (73%). In a parallel question (Q14), 82% of the participants indicate that learning become easier in traditional classroom setting than at learning at distance.

In Q12, we asked participants to express their thoughts on whether or not content become more difficult to understand when it is provided through internet (DE).

Table 4. *Participants responses on whether content become more difficult to understand when it's provided online (Q12)*

Valid	Not decide
	No
	Yes
	Total
Missing	System
	Total

As given in Table 4 above, although approximately 68% of the 1107 participants indicated that content become more difficult in DE, 30% disagree with the statement. In the analysis of the open-ended responses participants strongly indicate that it is not about whether or not content is online, but is all about the way how content is organized and provided to students. In addition to limited interaction between students and instructors, many participants stress on having a published book or documents. Due to background of the participants with open-education experience, which have been depended upon published materials, this was the process of changing reading behaviors and attitudes.

In another question (Q14), majority of the participants (82%) indicated that learning would be easier at the classroom settings. This result also supports another finding that previously given ones above. In the open-ended responses, participants especially stressed on the three important aspects: focus on leaning is easier in the classroom, no much disturbances, no other duties and special time is dedicated to learning in the classroom; interaction with instructors.

5.3. Missing Components in Distance Education

Based on our initial impression about participants' thoughts on DE, we asked them to reflect on missing components that may hinder their learning in the program they attended. According to the results;

Table 5. *Participants' thoughts on missing components of DE (Q13)*

Interaction	
Time	
Apropriate	
Rich Conte	
Lack of Inte	
Others	
Total	
Missing System	
Total	

As we investigate the responses in Table 5, it is clear that students insist on two important components for the success of their e-learning experience: Lack of interaction and appropriate teaching strategy described as plain and explicit approach by learners that make it easy to understand the content (45%). About 15% of the participants indicate that everything was all right for them and nothing else needed for learning. As we look over the overall data, it was obvious to us that students actually welcome e-learning experience, however, they find at some points difficult to adjust themselves to this new way of learning and teaching.

5.4. Reflections on Discussion Boards

The only interaction channel students had in given DE program was discussion boards as noted earlier. Participants' thoughts on use of discussion boards were in favor of their effectiveness. 64% of the participants find discussion boards useful.

Table 6. *Participants’ thoughts on usefulness of discussions boards on learning (Q16)*

Valid	Undeci
	Not Us
	Useful
	Total
Missing	System
	Total

Considering participants’ thoughts on lack of interaction shared previously, this finding was expected. Among several different responses, participants mostly used discussion boards for communicating other students, sharing their understanding of the specific subject, motivating each other, Those participants who do not think discussion boards useful point out their reason as lack of presence of instructor, answering the questions, lack of time, and irrelevant discussions or misleading.

Responses to Q15 with regard to comparison of participation opportunity at traditional classroom versus DE environment, participants strongly stressed on the effectiveness of classroom discussions (85%) comparing to those take place in discussion forums on their learning (11%). In other words, majority of the participants were in favor of having live, simultaneous discussions rather than asynchronies ones.

5.5. Participants with DE experience versus Distance Education

As given in descriptive section, 14% of the participants indicated that they had previous DE experience. To investigate if there was any difference among response between participants with DE experience and participants with no previous DE experience, Independent Samples t-test was implemented. But no statistically differences were found between participants’ responses on the questions.

VI. DISCUSSIONS

As noted, this project was the first DE project that the majority of the students in this study have experienced. Although students have reported that being part of the DE program was an opportunity for them because of their current employment status, they strongly noted that learning at distance was different and

difficult than that of traditional classroom for several reasons (i.e., motivation, interaction, limited time, other commitments etc). Among several important issues emerged from data, we purposefully focused on discussing pedagogical aspects of teaching and learning online. Based on our understanding and interpretation of the data, we conceptualized findings under two major groups: 1) pedagogical planning before teaching online, 2) implementation of pedagogy during teaching (see Figure 1).

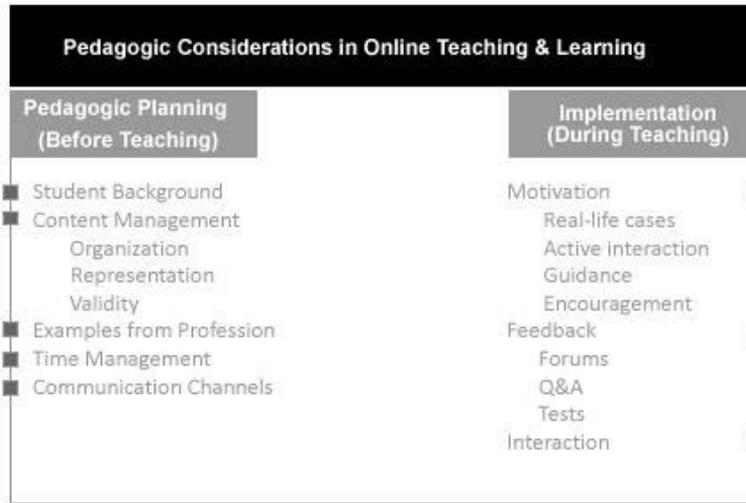


Figure 1. Pedagogic considerations in online teaching and learning.

Some of the mostly indicated topics were listed under “Pedagogic Planning” and “Implementation” categories. Based on the subjects given in Figure 1, three major issues were discussed below as their importance.

1. Planning Before Teaching

As we examine the planning section, students’ reflections on the effectiveness of learning online actually were not different than what we know about the general pedagogy of teaching and learning in the classroom setting. As Shulman (1986) discuss in details in Pedagogical Content Knowledge concept, teachers need to know not only about what to teach (content) but also ways how to teach it. Shulman points out that effective teaching requires teachers know details of the content, connection among the concepts, and some other relationships. In addition, knowing all details of the content area is not adequate to teach effectively. Teachers, according to Shulman, also need to know and have experiences about classroom management, students’ background, students’ understanding during the lesson (Shulman, 1986, 1987).

Most importantly, teacher needs to know how to choose and apply specific pedagogical approaches based on the subject matter so that students understand and learn better. Organization of the lesson requires considerations of different aspects

of pedagogy of teaching (i.e., student background, readiness, interest, what they understand, what not, how to exemplify). Based on the given discussions, we found similar pedagogical subjects in our research as given in Figure 1. Students in the planning section actually need more about a pedagogic approach that connects them to the content to be taught. To accomplish this, students report that more example from their profession, representation of the content in more summary and visual format, the validity and applicability of the content in real life are some the pedagogic issues that may be taken into consideration of the planning stage of the teaching.

One of the important issues we found in the data was students' understanding of the content to be delivered. Due to the several reasons (i.e., lack of real-time interaction between students and instructors, limited connections what students perform in their jobs and what they learn in the course) some participants reported that they found difficult to understand the content from the materials provided.

According to students, content needs to be developed not only from ideas, formula and some other theoretical details but also from real case examples, problems, and issues they face every day in their jobs as midwives. Several students also stress on the importance of the organization of the content according to students' backgrounds. Students believe that content should be organized in order from basic concepts to more complicated ones. Also, instructors need to emphasize on the important subjects as they do in traditional classrooms.

2. Social Presence Through Interactions

The importance of real-time interaction between students and instructors in the learning environment is one of the highly noted topics raised by participants. Majority of the students share their issues with learning in online environments as lack of real-time interaction with instructor. The need for clarifying some issues, asking question and receiving simultaneous response were some of the crucial components of learning online. Interactions among participating students and with instructor have been the topic of many research studies (Jung, Choi, Lim & Leem, 2002; Lin, Lin & Laffey, , 2008; Gilbert & Dabbagh, 2005).

As those students above represent some aspects of the interaction among students and teachers, the overall category emerged from data seems to indicate that the pedagogy of teaching in the classroom actually provide a medium for both learner and teacher to establish a shared pedagogy through questions, discussions and some other activities. In this study, findings also reveal some insights about the asynchronous versus synchrony interactions. Although participants eager to have real-time interaction, many of them also find it difficult to attend them due to their working times. Therefore, several of the participants seem to be fine with asynchronous discussion forums as long as instructor be there. Students in this case seem to be in need to have a communication with classmates and instructors

regardless of mode of communication. Participants, in very brief, feel “lonely in virtual space”. Presence of instructor and other students through messages would also satisfy students. Students in online learning environments wanted to see instructors and themselves “being there” and “being there with others” (Lin, Lin & Laffey, 2008).

3. Feedback Mechanism

As related to the previous category, students were highly sensitive about the existence of some type of feedback mechanism to test their understandings. Students in their postings as well as responses to the questionnaire indicated that they were not sure if they understand the content provided through LMS. At the very beginning of the program, the majority of the students asked program coordinators and instructors providing weekly questions for each unit. Although this was added to the system, students were still in need of other feedback mechanisms. Therefore, they strongly stress on the importance of the interactions so that they can check their understanding with other students and with instructor. Several students mentioned their appreciation of sharing understanding level and difficulty of the subject etc by other students. Students would like to have interactions not only to ask question but also to make sure they understand the subject correctly. Therefore, they insist to have at least some type quiz at the end of the each section.

VII. CONCLUSION

As discussed in the literature, social presence of instructor and students, organization of content and materials by instructor and arrangements by students to be “better time-managers and self-directed learners” seem to be important components of the online learning environments as we also discussed (Savery, 2005; Lin, Lin & Laffey, 2008; Shea, Fredericksen, Pickett, Pelz, & Swan, 2002).

According to Savyer (2005), social presence impacts interactions in online learning environments and low social presence may lead to “a high level of frustration, a critical attitude toward the instructor’s effectiveness, and a lower level of affective learning” (p.143). Shea et al (2002) also pointed out that interaction with instructor was the most significant factor on students’ satisfaction with online learning. Along with teachers’ readiness level of teaching online, being self-directed learners and time-managers require students to be more organized in online learning settings. Kosak et al. (2004) stress on the importance of pedagogical considerations in teaching online.

Participating adult students’ experiences with online learning in this case suggest that online program coordinators, instructional designers and instructors should certainly consider presence of interactions, need for pedagogical planning before and during the teaching that include feedbacks on students learning difficulties, appropriate teaching strategies, presentation style of the content and some others.

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