

## Adoption Process of Instructors to Online Roles

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### Abstract

Online learning activities has started to rise in 1990s and continued to develop in 2000s with new instructional technologies. Online developments caused a dramatic evolution in instructors' online roles, and raises fundamental questions about how instructors will adopt these changing roles for their teaching-learning activities. At this study adoption process of instructors' online roles was investigated deeply using ethnographic case study methodology. Sample of study is 3 instructors at non-thesis master's program which is Educational Administration, Controlling, Planning and Economics. Researcher joined online teaching learning activities as student with new identity and collected data using ethnographic approaches. Data about adoption process were collected focusing 4 main online roles of instructor which are pedagogical technical, social and managerial. Results of study offers deep information about instructors' adoption process to online learning environment

**Keywords:** instructors' online roles, ethnographic study, adoption process to online roles

### 1. Introduction

Online learning activities has started to rise in 1990s and continued to develop in 2000s with new instructional technologies. Online developments caused a dramatic evolution in instructors' online roles, and raises fundamental questions about how instructors will adopt these changing roles for their teaching-learning activities.

Higher education institutions widely use online learning because of advantages of time and space convenience that is compared with face to face learning. (Debutlet, 2008). In higher education there is a high increase in online learning but providing and receiving education and its effectiveness continues to be questioned. (Jorgensen, 2002). Nowadays many online programs and courses are arranged and designed based on traditional models and conducted similarly with traditional classes. (Lou, 2004; Ying, Fuzong and Xue, 2003).

Online learning environments has transitioned to role of online instructor from teacher to facilitator. In literature there are different definitions of the changing role of instructors in online learning environment. Although instructor is seen as facilitator and learning is more student centered, all the definitions show importance of role of instructors in online learning experiences. Instructor designs instruction and guides to students in social and cognitive engagement process out of being a moderator. Instructor plays vital role in all part of online learning with location of being of center of learning process.

(Anderson, Rourke, Garrison and Archer, 2001; Berge, 1995; Mason, 1991; Paulsen, 1995).

Not considering type of distance learning program in an institution in higher education, if success is aimed, instructors must do more than provide information and being center of instruction. (Vonderwell and Sawery, 2004). Instructor need to understand online learning environment and student's needs truly and should design learning environment to facilitate learning, increase interaction and access to environment in higher education. Instructor's ability adopting to new competencies is key to success of online learning rather than mastering technology.

Many researchers have pointed out that the instructor is the key element to the success of a distance education program. However, despite the growth of online instructor's role in online learning environment, almost none of the researcher took in to consideration in terms of online learning students' perspective. (Abdulla, 2006). Instructors should be knowledgeable in a successive online learning program which has effective techniques and strategies.

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The findings of this study will help the online instructors make informed decisions in order to facilitate distance learning activities. This study will also help administrators and organizations in higher education institutions in terms of developing policies , making decisions and implementing distance learning programs.

### **1.1. Instructors' Online Roles**

To investigate adoption process of instructors to online roles, Berge's instructors' roles - pedagogical, managerial, social, and technical - have been used (Berge 1995, 1996).

**Pedagogical:** The pedagogical role encompasses everything done to support the learning process of individual students or working groups. Based on the application of Vygotsky's sociocultural theory to an online course for pre-service teachers. Bonk et al. (1999) determines roles of instructors in instruction and activities that conducts during online discussions. These roles emerged during instructions are mostly pedagogical; giving advice or suggestions; fostering student reflection or self-awareness; pushing students to explore other sources of information; prompting students to explain or elaborate on their ideas; providing feedback or praise; cognitive task structuring; 'weaving' students' contributions into a single summary in order to capture and re-focus students on the essence of ongoing or completed discussions (Harasim et al., 1995).

**Managerial:** Managerial role of instructors are related with designing of activities in online course and managing these activities .Managerial roles compose organizational, procedural and administrative abilities of instructors in online learning environment. (Berge, 1995).

**Social:** Social role of instructor include to promote a friendly ,flexible environment and learning community culture to support student's learning process. (Bonk, 2001).

**Technical:** Instructors in its technical roles compose choosing appropriate software and technologies, to assist students to overcome their technical problems, to arrange technology for students in a comfortable environment

The purpose of this research was to examine the most important factors affecting adoption process to four dimensions of online instructor roles in a rapidly-expanding online MBA program. This study will focus on the following research questions:

- 1- What are perceptions of instructors' to their online roles in terms of Berge's (Berge, 1995) classifications?
- 2- What are factors affecting adoption process of four dimensions of instructor roles?

## **2. Methodology**

The purpose of this study was to investigate adoption process of instructor to their online roles and to reveal factors affecting adoption process of instructor involved in a distance learning environment. The ethnographic case study approach for such exploratory research is useful for better understanding an online learning community. (Stake, 1994).

The central core of ethnography is a concern with the meaning of actions and events to the people the researcher is trying to understand; it always implies an understanding of culture. All of us learn about culture by observing other people, listening to them, and then making inferences. In developing case studies using the ethnographic research approach, inferences are made from three sources: 1) from what people say; 2) from the way people act; and 3) from the artifacts people use (Spradley, 1979).

### **2.1. Research Group**

Sample of study is 3 instructors at non-thesis master's program which is Educational Administration, Controlling, Planning and Economics. Data collected using observation forms and semi conducted interviews made with 3 instructor. Study was conducted at 3 steps.

### **2.2. First Step: Observing Instructors during online program**

Researcher joined online program as student with a new identity .Researcher was participant observer, an active member of the online program. Researcher observed instructor's activities based on four main online role of instructor using observation forms. Ethnographic case study was centered on technical, managerial, social and pedagogical roles of instructor at online learning system. Researcher observed instructors during 14 weeks in live classes and asynchronous learning activities. Researcher impacted online learning to reveal and observe instructor's roles. All of live classed were video recorded. Another data resource is instructor's asynchronous activities during education. Researcher was also analyzed video document and asynchronous activities to collect data.

### **2.3. Second Step: Data Collection through Interviews**

One interview lasting around 45 minutes was conducted with each instructor at the end of online program. Interviews were focused on perceptions of instructors to their online roles and factors affecting their adoption process to their online roles.

### **2.4. Third Step: Analysis and Writing**

Instructor specified their roles and adoption process from their own point of view. Analysis was made to interpret what was said and what was observed. Major categories were emerged from analyzing the data.

Researcher needed to ensure that data collected from observations, video documents and interviews has a valid reflection on instructor's adoption process to online roles and determine whether the conclusions drawn are generalizable or not. Therefore similar to most researchers (Şahin, 2005; Nesrin 2003) in the qualitative paradigm, the researcher used triangulation, which in simple terms suggests that the researcher used multiple methods to collect the relevant data. According to Merriam, the opportunity to use multiple methods of data collection is a major strength of a case study research (Merriam, 1961). Methodological triangulation combines dissimilar methods to study same topic so that the flaws of one method are used as the strength of another. In this study, the researcher used observations, interviews and video documents to collect data.

### **3. Findings**

Data from the interviews, observations and document analysis were combined to describe how the instructors perceived and adopt their roles in the online learning environment

Researcher made observations focusing on 4 main roles of instructors. Researcher observed activities, responsibilities and subroles of instructor at each main role.

#### **3.1. Adoption Process and Perception of Instructors to Online Pedagogical Roles**

Adoption process to pedagogical roles was analyzed at four main perspectives, course designer, profession-inspirer, feedback giver, interaction facilitator.

**Table 1.** Analyses of instructors' pedagogical online roles from three dimensions

Pedagogical Roles		Data Collected From Observations	Data Collected From Video Documents And Asynchronous Activities	Data Collected From Interviews
Course designer	I-1	I-1 has problems designing interactive learning elements,	I-1 could not design course materials, all time use same materials.	I-1 claims that he has enough skills for designing course.
	I-2	I-2 has problems designing interactive learning elements, does not want to share experiences with colleagues	I-2 need help designing online courses; just use same type of material.	I-2 claims that he is insufficient as course designer.
	I-3	I-3 has problems designing interactive learning elements,	I-2 need help designing online courses.	I-1 claims that he has enough skills for designing course.
Profession-inspirer	I-1	I-1 can not promote professional dialogue among online learners	I-1 can not promote professional dialogue among online learners	I-1 claim he is enough promoting dialogues.
	I-2	I-2 can promote professional dialogue among online learners	I-2 can organize dialogues at asynchronous part of online system	I-2 claim he is enough promoting dialogues.
	I-3	I-3 can not promote professional dialogue among online learners	I-3 can not promote professional dialogue among online learners	I-3 claims that he is insufficient as profession-inspirer.
Feedback-giver	I-1	I-1 can provide timely and high quality feedback	I-1 can provide timely and high quality feedback	I-1 claims that he can provide feedback.
	I-2	I-2 can not provide timely and high quality feedback	I-2 can not provide timely and high quality feedback	I-2 claims that he can provide feedback.
	I-3	I-3 provides timely and high quality feedback; provide formative feedback for continuous learning engagement	I-3 can provide timely and high quality feedback	I-1 claims that he can provide feedback.
Interaction facilitator	I-1	I-1 can facilitate peer interaction during live classes.	I-1 can facilitate peer interaction during live classes, can not provide interaction at asynchronous discussions	I-1 claims that he can provide peer interaction among students.
	I-2	I-2 can not facilitate peer interaction enough during live classes.	I-2 can not facilitate peer interaction enough during live classes and did not use asynchronous discussions.	I-2 claims that he has problems facilitating peer interaction
	I-3	I-3 can facilitate peer interaction during live classes.	I-3 can facilitate peer interaction during live classes, can provide interaction at asynchronous discussions	I-3 claims that he can provide peer interaction among students.

Table 1 shows analyses of instructors' pedagogical roles from three dimensions; observations, document analyses and interviews. Results of table 1 show that instructors could not complete their adoption process to their pedagogical roles. There are some differences at instructor's views and observations. Although instructors claim that they are enough at some pedagogical roles, observation results and document analyses show that they could not accomplish their online pedagogical roles. Factors affecting to instructors' adoption process to pedagogical roles were shown at Table 2.

**Table 2.** Factors affecting instructors' adoption process to online pedagogical roles

		<b>Lack of Technical Capacity</b>	<b>Affection of using Previous pedagogical experiences</b>	<b>Control of learning environment</b>	<b>Negative attitudes</b>
Interviews	I-1	X	X	X	X
	I-2		X		
	I-3				X
Observations	I-1		X	X	
	I-2	X	X	X	
	I-3	X		X	
Document analyses	I-1		X	X	
	I-2	X			
	I-3	X		X	X

Instructor coded I-1 said that “ I have problems controlling classroom, and could not decide to chose teaching methods and materials.” Observation and document analyses results also show that instructor coded I-1 has problems to accomplish online pedagogical roles.

Instructor coded I-2 said that “It was fist time that I am an instructor at online learning program. I tried to use my previous experiences and methods for my teaching. I could not design and use new methodologies for online learning.” Observations and document analyses results also show that instructor coded I-2 has lack of technical capacity problems for controlling learning environment and try to use previous teaching experiences for online teaching. Instructor coded I-3 has negative attitudes to online learning. Main reasons of his attitudes are his lack of technical capacity, controlling learning environment and not to choose appropriate teaching and methods for online teaching. Instructors have problems completing their pedagogical roles and four main affect; lack of technical capacity, trend of using previous pedagogical experiences, controlling classrooms and negative attitudes.

### **3.2. Adoption process and perception of instructors to online managerial roles**

Adoption process to managerial roles was analyzed at two main perspectives; conference manager and organizer and planner.

**Table 3.** Analyses of instructors' Managerial online roles from three dimensions.

Managerial Roles		Data Collected From Observations	Data Collected From Video Documents And Asynchronous Activities	Data Collected From Interviews
Conference manager	I-1	I-1 could not ensure equity in online discussion; provide ,similar students joined to discussions	I-1 could not has ensured equity in online discussion; provide ,similar students joined to discussions, instructor ensured equity in asynchronous activities	I-1 claims that he ensured equity at online learning and he has enough skills for conference manager role.
	I-2	I-1 could ensure equity in online discussion; provide ,similar students joined to discussions and promote knowledge construction	I-1 could ensure equity in online discussion; provide ,similar students joined to discussions and promote knowledge construction	I-2 claims that he is sufficient four conference management.
	I-3	I-3 could not ensure equity in online discussion; provide ,similar students joined to discussions	I-3 could not has ensured equity in online discussion; provide ,similar students joined to discussions, instructor ensured equity in asynchronous activities	I-1 claims that he has enough skills for conference manager role.
Organizer and planner	I-1	I-1 provided clear instructions and organization of course structure at some classes, I-1 could not achieve a balance between structure and flexibility	I-1 provided clear instructions and organization of course structure at some classes, could not provide a clear instruction and organization at asynchronous activities	I-1 claim he is enough organizing instructions and course.
	I-2	I-2 tried to organize instructions and courses using old experiences, have problems composing balance between time, structure and flexibility	I-2 provided clear instructions and organization of course structure at some classes, could not provide a clear instruction and organization at asynchronous activities	I-2 claim he has problems organizing instructions and course especially at asynchronous activities
	I-3	I-3 provided clear instructions and organization of course structure at some classes, I-1 could not achieve a balance between structure and flexibility	I-3 provided clear instructions and organization of course structure at some classes, could not provide a clear instruction and organization at asynchronous activities	I-3 claim he is enough for his organizer and planner role.

Managerial roles include the organizational, procedural, and administrative tasks associated with the Learning environment (Berger, 1995). Instructors have two main managerial role; conference manager and organizer and planner. Results of Table 3- show that instructors have problems managing the online teaching and learning activities. Main problem of instructors was to manage discussions at live classes. They have spent a lot of time for discussions and have problems to complete schedule in time. Another problem was at asynchronous discussions some students take control of the asynchronous discussions and instructors could not control asynchronous discussions.

At interviews instructor noted that online learners need to be provided with a clear structure and timeline to keep them engaged in learning their busy work schedules. Instructor coded I-2 commented that; "At first course I introduces to timeline to students, But following weeks I have problems following up weekly activities. I could

not control time of synchronous discussions. I have to transfer some discussions to asynchronous part of online system.”

Instructor could not compose flexibility and tried to apply timeline in time. Students get problems completing their assignment in time.

### 3.3. Adoption process and perception of instructors to online social roles

**Table 4.** Analyses of instructors’ social online roles from three dimensions

Social Roles		Data Collected From Observations	Data Collected From Video Documents And Asynchronous Activities	Data Collected From Interviews
Social rapport builder	I-1	I-1 tried to build social rapport; encourage students joining discussions	I-1 tried to build social rapport, encouraged students being part of online learning community	I-1 claims that he has problems accomplishing his social roles due to insufficient abilities of online learning system.
	I-2	I-2 tried to be part of online learning community, encourage students to discuss and being together at different online systems	I-2 tried to build social rapport, encouraged students being part of online learning community, especially encouraged students to be active at asynchronous activities	I-2 claims that he is sufficient four his social role.
	I-3	I-3 have problems building social rapport, could not communicate students enough, could not compose interaction among students	I-3 have problems building social rapport, could not communicate students enough, could not compose interaction among students	I-3 claims that he is insufficient four his social role.

Instructors have problems being part of online learning community. Instructor coded I-1 said that “This was first time I was a part of online learning, I have a lot negative attitudes before to online courses, but following weeks I have adopted to online environment and encourage students being active at online system.

Instructors noted that ability to build a more personal relationship between educator and student was their biggest challenge for online learning. Instructor coded I-3 said that “Online learning is impersonal environment. I could not develop rapport with students, because I can not see interaction between students. That was my biggest problem in online environment. “

In summary, the instructors had approximately same feelings regarding the importance of the social role in this online MBA program. Also results of observations and documents analyses show that instructors had tried to compose online learning community. In general, these instructors were not yet convinced of the relevance and viability of the social role for student learning. Various technological limitations, negative attitudes about distance education and concerns about time affected their efforts building online learning community.

**3.4. Adoption process and perception of instructors to online technical roles**

Adoption process to technical roles was analyzed at three main perspectives; technical coordinator, media designer and technology integrator.

**Table 5.** Analyses of instructors' technical online roles from three dimensions.

Technical Roles		Data Collected From Observations	Data Collected From Video Documents And Asynchronous Activities	Data Collected From Interviews
Technical coordinator	I-1	I-1 tried to help students for technical problems, but his lack of technical ability he could not refer enough support.	I-1 tried to help students for technical problems, but his lack of technical ability he could not refer enough support, discussed students about their technical problems at asynchronous activities	I-1 claims that his lack of technical capacity blocked his efforts to refer technical support to students.
	I-2	I-2 could not refer enough help to students, when students get problems he directed them online system staff.	I-2 could not refer enough help to students for their technical problems.	I-2 claims that he is insufficient for technical coordinator
	I-3	I-3 was willingly to help students for their technical problems but his lack of technical knowledge blocked his efforts, he just directed to students to online system staff.	I-3 could not has ensured equity in online discussion; provide ,similar students joined to discussions, instructor ensured equity in asynchronous activities	I-1 claims that he has he is willingness but insufficient for technical coordinator
Media designer	I-1	I-1 could not develop rich multi media tools, just use presentation and texts for his courses, did not demand extra tools from online system staff.	I-1 just use presentations and texts, used asynchronous parts of online systems only for discussions, did not use any other elements of online system	I-1 claim he is insufficient as media designer.
	I-2	I-2 used presentations and texts documents, used video for two classes, did not demand extra tools from online system staff.	I-2 just use presentations and texts, used asynchronous parts of online systems only for discussions, did not use any other elements of online system	I-2 claim he has some deficiencies but generally he is sufficient for media designer.
	I-3	I-3 used presentations ,texts documents and used survey tool, did not demand extra tools from online system staff.	I-2 just use presentations and texts, used asynchronous parts of online systems only for discussions, did not use any other elements of online system	I-3 claim he is enough for media designer role.
Technology integrator	I-1	I-1 did not use chat rooms, web conferencing and audio conferencing in live classes effectively, was unwillingness to use new technologies	I-1 did not use discussion forums effectively, was unwillingness to use new technologies	I-1 claim that he could not use new technologies effectively lack of his technical ability
	I-2	I-2 tried to organize chat rooms and discussions, was willingness to use new technologies, used web conferencing at some classes.	I-2 tried to organize asynchronous activities at discussion forums	I-2 claim that his technology integrator role is related with his technology usage level.
	I-3	I-3 used just minimum part of online system out of surveys, was willingness to use new technologies,	I-3 did not use functions of asynchronous activities effectively.	I-3 claim he is not enough for his technology integrator role.

Table 5 shows findings about instructor's technical roles. Instructors noted that their biggest problems at online learning were technical. Instructor coded I-3 said that "My insufficiencies for my technical roles affected to accomplish and adopt my other online roles". Instructors tried to use online chat rooms in live classes. But they have problems controlling online chat activities. Instructor coded I-2 said that "It was frustrating not to be able to control chat activities and time consume during chat activities".

Although instructors know functions of online system, they just use limited parts of online system. They were unwillingness to use online system tools. Instructor coded I-1 noted that "I know that system has a lot of tool to prepare an effective lesson, but I was hesitating to use these Technologies because of my lack of technical capacity."

Summary, new technologies increased efforts to include highly interactive pedagogical tools. However, the overall level of technology use was still relatively low. Presentations, asynchronous discussion forums, chat rooms were the most frequently employed tools, whereas more sophisticated interactive tools video, web conferencing, audio& video conferencing, email and survey tool, were in relatively low use.

#### **4. Discussions and Conclusion**

The findings clarified instructor's adoption process and perception of instructor to online roles. Instructors performed different roles at different degrees. Instructor's online roles were investigated from three aspects, observations, interviews and document analyses and asynchronous activities. One important point at this study, there were different findings at the view of these three aspects. Main reason for this situation was perception of instructors to their roles. This was first online learning experiences of instructors. Although they could not perform their role adequately, they claim that they are sufficient and performed well their online roles.

Instructors most strongly emphasize the pedagogical roles. Results of observations and document analyses show that although instructors emphasize pedagogical roles mostly, they have big problems for accomplishing and adopting their roles. This finding is consistent with similar with literature. Rohfeld and Hiemstra (1995), in their study commented that online instructors have biggest problems although they give more importance to pedagogical roles.

The degree of facilitating online discussion of online instructors was different from each other. This study revealed that the factors affecting facilitating online discussions. Timing, perception of instructors, moderating skills, technical capacity of instructors was main factors affecting degree of facilitating online discussions. These results are similar with Liu 's (2005) study. Liu stated that timing, course type, perceptions, and moderating skills are important factors for online discussions and show variations among instructor.

Also consistent with the literature is the finding that effect of previous experiences on instructors' adoption process is an important factor. Salmon and Giles (1997) noted that online learning is different from traditional learning, if novice online teachers are insistent to use previous experiences they get problems to build online learning.

The need for flexibility at managerial roles has also been supported in other literature. For example, Rohfeld and Hiemstra (1995) have argued that learners who have a high level of control over their learning activities are encouraged to take greater responsibility for their learning.

The findings related to instructors' perceptions and adoption of the social roles were highly similar to the Bawane and Spector's (2009) study. Bawane and Spector noted that effective online teaching is adapting to student needs, communicating effectively, and showing concern for building social rapport.

Differently from other studies (Lui, 2005; Anderson, 2001; Teles, 2001) instructor's online technical roles present significant challenges to online instructors

On the whole, the study and results imply that factors affecting instructor's adoption process and perceptions of instructors must be evaluated for designing effective online learning and composing online learning community. Lack of technical ability has influence on pedagogical, managerial and social roles of instructor. Being inexperienced for online learning affected to development of instructor's online role about designing, controlling and managing learning environment.

Finally, the findings in our study confirmed that instructor's effective usage of online learning environment is related how and more instructors adopt online roles. Instructors know that if they accomplish their roles successfully, they will provide satisfactory experience for online learners

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