A Blended Learning Environment as Perceived and Experienced by Course Instructor

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Abstract: Face-to-face (FTF) and online environments require different skills and techniques for an instructor to employ for a lesson, while blended learning requires a harmony. The increased research on the conceptual framework and design considerations of blended learning leads to a need to unfold the experiences of an instructor in the design, development, and implementation processes in a blended learning environment. This study is a preliminary case to understand the context of a blended environment based on instructor experiences. The results indicated that blending FTF and online environments require thoughtful design and implementation since they pursue different features such as student and time management, communication, and guidance.

Key Words: Blended Learning Environments, Instructor Roles, Instructor Experiences.

Introduction

Blended learning has the potential of combining best of two worlds: FTF and online environments. With this feature, it is gaining more attention in higher education. There are lots of issues for the instructor to take into consideration while, developing the course for both in FTF and online environments. Teaching methods, instructional approaches, classroom and time management techniques, communication, motivation, resource allocation, required technical skills, and interpersonal skills are a few to name.

According to Driscoll (2002), blended learning evokes different things to different people. That is, it may be perceived as a mix of pedagogies, Web-based technologies, as well as the combination of any form of instructional technology with face-to-face (FTF) instructor-led training. This is probably due to the lack of a definite conceptual and pedagogical framework for what blended learning serves for (Kerres & De Witt, 2003). There is a need to investigate the experiences and roles of instructors in the entire context for the conceptualization of blended learning. An understanding of what is going on in a blended learning environment and the perceptions of the people affected from it can contribute to a much-needed knowledge for successful learning. It is the aim of the researchers to create an understanding of the design, development and implementation processes in a blended learning environment from the instructor’s perspectives and experiences. This study is a preliminary case to understand the context of a sample blended environment from instructor experiences.

Method

Background of the Study

In this study, an undergraduate course, CEIT 209: Computer Aided Instruction, was designed in a blended learning format at fall semester (September-January) in 2005. The course is given to sophomores in Computer Education and Instructional Technology Department (CEIT) in Middle East Technical University, Turkey. It is a must course and was given in FTF format until 2005 fall semester.

Before the design of the course, the researcher analyzed students, content, and context of the course. This process began after the fall semester in 2004, in which the course was offered in a FTF environment. At the end of fall semester in 2004, semi-structured interviews were done with five students and the course instructor to gather data for their experiences and perceptions on FTF environment. The analysis of these data was done with a content analysis process as Miles and Huberman (1994) described. The results of these interviews showed the picture of the course context and provided data for the redesign of the course in blended format. What is meant as blended learning in the context of this study is a mix of FTF environment and online
learning environment. The infrastructure and base of the online environment of the course was created and
developed by Ozden (2002), who was using this system in his undergraduate and graduate classes over since
1998. It was revised and improved by taking user reactions during these years. This environment was adapted
to the needs of the course.

After designing and developing the blended learning environment, the researcher implemented the
course as the instructor. She had diaries during all processes in order to stimulate critical reflection of her
experiences. In the diaries, which are the main sources of data in this study, she reflected on important
processes that she had experienced. These diaries were analyzed by the researcher with peer debriefing to
confirm the credibility of the information which she had interpreted.

Design of the Study

This research is conducted as a case study. As Merriam (1998) indicates, case study design is used to
understand context-related phenomenon while anchoring in real-life situations. The case study is an appropriate
method of inquiry for this study since the researcher aims to understand a particular phenomenon in its natural
setting in an in-depth way. The data were gathered from documents included instructor diaries, learners’
portfolios and logs in Web site, and the other course related data like web site content, forum discussions, in-
class materials, etc.

The first author of this research was the instructor of this course, and designed, developed, and
implemented the course. Being a teaching assistant in the department, the researcher is familiar with the socio-
cultural context of the department. Having the instructor role also provided the researcher to be an active
participant in the context of the study. This gave a direct insight into a very different set of challenges. That is,
it allowed an in-depth analysis of the content of the course, student engagement, and the dynamics of the
context of the study. As Bogdan and Biklen (1998) noted, since it is difficult to get away from who you are,
and what you believe; the study is affected by researcher’s biases. The researcher tried to avoid this threat by
expert checking, peer observations, and peer debriefing methods. Two experts from departments of CEIT and
Educational Sciences guided the processes during the design, development and implementation of the course.
These experts provided feedback on the outcomes of document analyses and analyses of field notes of the
instructor. Two peers, who were doctorate students in the same department and familiar to blended learning
environments observed the courses in FTF environment, and also tracked and examined the course Web site.
The researcher asked these peers about the findings and took feedback on the analyses of field notes and
documents.

Results and Discussion

The instructor had different experiences in the two environments of the blended environment while
designing, developing and implementing the course: FTF environment and online environment. Even if they
were mixed in the course, each had its own characteristics and challenged the instructor from different aspects.

The Design of the Blended Course

The core of the design of the blended environment was based on creating a flexible and rich learning
environment, which would support interaction and allow student collaboration and cooperation. Rather than
presenting the information only, a two-way communication between learners and the instructor was also aimed.
The results of the interviews with students and instructor of the course in Fall 2004 semester indicated that the
instructor should be cautious about the activities design, interaction, learner support, and online course
integration. Therefore, with the core of the design considerations and the results of the past interviews, the
instructor designed the course as in blended format while taking each environment into consideration. The most
important challenge that the researcher faced was to make a balance between online activities and FTF
activities to make them go hand in hand. Other than this, another challenge was the time required to develop
both FTF and online activities.

FTF Environment: The activities were designed to support student learning flexibly and to allow active
student participation by incorporating a bunch of variety. Additionally as Arends (1998) suggested, to design a
rich learning environment, designers should promote self-regulated learning. The activities that the instructor
designed included expert seminars; assignments like book reviews and sample software evaluations; student
presentations; cooperative learning activities in-class; group projects out-of-class; and student presentations of the projects.

For the FTF interactions of the course, the instructor aimed to create a friendly environment which would support all types of interaction as Moore (1989) identified: student-content, student-teacher, and student-student. The group activities, assignments, and expert seminars were designed to serve for student-content interaction. Student presentations and learner-centered approaches to classroom teaching of the instructor were designed to promote student-teacher interaction, while cooperative learning activities, group projects, and student presentations were designed to serve for student-student interaction.

**Online Environment:** For the design of the online environment, the instructor planned to use a local Learning Management System. As the theoretical framework of the study embraced a student-centered approach by encouraging active learning, the researcher aimed to incorporate the following considerations as Levin et al. (2001) proposed:

1. Rich student-student interactions through discussions in forums, instant messaging environment and group work assignments,
2. Adequate and timely feedback from instructors through messages in forums, e-mail posts.
3. Relevant and challenging assignments with guidelines and relevant resource links,
4. Flexibility in teaching and learning, by allowing individual pace in the completion of any given assignment,
5. Coordinated learning environments by scheduling tasks at the beginning of the term.

Other than these, according to Falvo and Solloway (2004) course designers need to address the socio-cultural context of the online learning environment, as well as the content or subject matter, which is being addressed in their courses. In order to support socio-cultural context, it is important to integrate the critical elements into the learning environment: collaboration and conversation. Collaboration was supported in both environments. However, conversation was only in FTF environment since the researcher did not see it as a necessity for online environment.

**The Development of the Blended Course**

The development process began together with the design phase. During the development of the course, content development, resource allocation, and creation of the course web site both in technical and instructional means challenged the researcher. Findings resources from the Internet and print and audiovisual sources took a lot of time. She could not even finish this process before the course began. Instead, she continued this process throughout the term in weekly periods.

**FTF Environment:** Developing FTF activities challenged the instructor in terms of content and resource allocation. However, it did not require much time. After each week’s course, several iterations were done to improve the activities and relate them to students’ needs. Since the course was an introductory course and students did not have a conceptual background on the topic, the researcher needed to develop more detailed guidelines for assignments, and allocate more fundamental resources.

**Online Environment:** The online environment had a non-linear, and dynamic structure. At the beginning of the term, the researcher conducted a usability study with a user test with seven students that are registered the course and expert evaluations with Nielsen’s (2005) ten heuristics, and redesigned the course accordingly. The students could have access to web site with user-ids and passwords due to security and personalization reasons. The students were monitored with logs. The web site included the following main categories:

- Course materials
  o Course Information
  o Content
  o Resources links
- Assignment links
  o Book review
  o Software evaluation
  o Homework
- Announcements
The Implementation of the Blended Course

In this part, the findings are presented together for the two environments. The reason behind this is that when the course began, the experiences for two environments affected each other. Throughout the implementation of the course, the researcher came across challenges that she could not imagine. Classroom management, time management, interaction and communication, and guidance were the most important of them. For example, several students not volunteering the FTF activities at all or not participating the FTF sessions were actively responding to questions in forums. The students that actively participated in FTF course were not interested in forum or any interactive communication tool. Since the online environment lacks mimics and gestures, the instructor had difficulty to manage those students and communicate with them. This can be a challenge for the instructor since he/she is the guide of that environment. Some students stated that since they know the instructor in FTF environment, they could understand what she meant by her writings in online environment. However, this cannot be true for the instructor, since she may not know how to behave a student in online environment if the student does not participate in FTF courses. Another important thing was time management for the instructor. In addition to weekly FTF meetings and office hours, the instructor needed to spend most of her time reading postings, handling them, tracking students, and updating information in the site. She tried to be available during whole week in front of a computer for the students. In addition, since the number of students was too much for online discussions (N=51), the discussions could be done within groups.

Beside the afore-mentioned challenges, allowing a flexible environment and incorporating practical activities increased the motivation of students, which satisfied the instructor. The instructor believed that with the strengths of the two environments, she provided a flexible and self-regulated learning environment. This enabled students to communicate and interact with each other and instructor; and cooperate and collaborate for creating real world projects both in class and out-of-class environments. She could also coordinate them and provided feedback throughout the week, and allowed self-pacing by providing all materials including presentation documents in both environments.
The results of the study showed that when blended learning is selected for the course format, the instructor needed to deal and pursue the harmony of two environments as well as dealing with their features within their own contexts as stated in the literature. Blending FTF and online environments require thoughtful design and implementation since they pursue different student and time management, communication, interaction, and guidance features. The results may help researchers and practitioners to be informed of the factors, strategies and challenges that need to be taken into account when utilizing a blended learning environment.

References


