

Teaching in Cyberspace: A Qualitative Approach to e-learning

Bushra Iqbal Chohan
Fatima Jinnah Women University, Rawalpindi

This qualitative study explored instructors' reflective perspectives regarding challenges facing during online instruction. Faculty members ($N=18$) of Virtual University of Pakistan from different campuses ($N=04$) were selected as a sample and in-depth interviews were carried out in their offices. The texts were coded and analyzed qualitatively by employing *Grounded Theory Approach* (Creswell, 2003). From the analysis, five main categories were derived regarding challenges in online instruction: hiring of qualified professors, guidance and financial support to enhance enrollment, technology access, lack of persistence among virtual students, **communication hindrances between the instructor and student. Moreover, instructors' perceptions revealed** that e-learning should be facilitated in Pakistan, as it is an effective mode of learning in the context of a developing country where majority of virtual students are either working professionals or females of remote areas who cannot join traditional learning system for enhancing their capabilities.

Keywords: e-learning, Virtual University, online communication, Grounded Theory Approach

Virtual mode of instruction has significantly affected changes both in the approaches teachers teach and the students learn. Of special importance is the impact online instruction has had on the role of the instructor, from authority figure to facilitator (Ryan, Carlton & Ali, 2004). Morgan and Toledo (2006) stated that "instructors of higher education courses have been utilizing online course delivery systems for many years, implementing blended or full course **delivery in an online format**" (p.333). They face challenges that how to deal with the students in virtual climate despite of face-to-face contact. Kupczynski, Ice, Wiesenmayer, and McCluskey (2010) were of the view that the asynchronous cyberspace participation could create an illusion of anonymity, after the first few weeks of calculated, polite, exchanges (p.119).

The movement into online education raises questions about the workload and time demands required for faculty engaged in online teaching (Mandernach, Dailey-Hebert, & Donnelly-Sallee, 2007, p.1). The virtual learning environment does not allow for hints of verbal or non-verbal communication. This results in greater probability of misunderstanding than in traditional learning environment. In this context, the focus of this study was **instructors' perceptions regarding challenges facing in the online instructional environment.**

This study was conducted in the Virtual University of Pakistan that is first public sector university of the country and is based completely on modern information and communication technologies. It was founded in 2002 and now has established its campuses over sixty cities of the country with more than a hundred affiliated institutions

providing infrastructure support to the students. It is a not-for-profit institution that provides an affordable quality education to aspiring students all over the country. It uses free-to-air satellite television broadcasts and the internet, that allows students to follow its rigorous programs regardless of their physical locations. **Overseas Pakistani students are also enrolled in various universities' programs.** Being the only university that is completely associated with e-learning programs, the faculty members of this university was selected for study purpose.

Method

This study employed qualitative approach of research. Qualitative research methods, with their flexibility and an interpretative approach, enabled the researcher to capture the intangible issues related to system of e-learning. The epistemological position of the researcher also suggested that for generating in-depth data, she would have to interact with the virtual teachers as key informants, talk to them, listen to them and gain access to their insights and **articulations in order to capture their "lived experiences"** (Hesse-Biber & Leavy, 2006, p.317). In correspondence with the research questions, a study was designed with semi structured in-depth interviews of selected group of faculty members of Virtual University of Pakistan. The rationale of using interview technique was the assumption that **"individuals have unique and important knowledge about the social world that is ascertainable through verbal communication"** (Hesse-Biber, & Leavy, 2006, p.119). An interview guide was prepared for study purpose, in the light of existing literature on e-learning. The interview guide was divided into themed sections so that the information obtained from each participant can be to some extent regulated, yet allowing the researcher to explore the individual differences.

In this way, faculty members ($N=18$) from different discipline of studies at four different campuses of Virtual

Correspondence concerning this article should be addressed to
Bushra Iqbal Chohan Assistant Professor Fatima Jinnah Women
University, Rawalpindi, Pakistan. Email:
bushra_chohan@hotmail.com

University of Pakistan were interviewed and the texts were coded and analyzed with the help of *Grounded Theory Approach* (Creswell, 2003). Semi-structured interviews (based on interview protocol) were conducted with the sample, in the months of February and March 2013. Interviews averaging approximately 25 to 30 minutes were recorded and also briefly noted and later transcribed in detail. The participants felt safe, **comfortable, as “though what they were saying was valued”** ((Hesse-Biber & Leavy, 2006, p.128). In qualitative research, there is greater probability to face ethical problems associated with interference upon confidentiality and with gaining informed consent from research participants. Ethical considerations of interviewing on issues related to official matters were therefore, imperative in relation to confidentiality.

Analysis

The analytic procedure was based on immersion in the data and repeated organization, coding, and constant comparisons, which are the main features of grounded theory approach. **“The core feature of qualitative data analysis is the coding process”** (Creswell & Clark, 2007, p. 132). **“Coding is a central part of a grounded theory approach and involves extracting meaning from nonnumeric data such as text”** (Hesse-Biber & Leavy, 2006, p.349). It is a **“process of grouping evidence and labeling ideas so that they reflect increasingly broader perspectives”** (Creswell & Clark, 2007, p.132). The interviews taken for this study were transcribed **verbatim. All the transcriptions were “regarded as ‘the truth’ and each transcription was considered to contain a one-to-one correspondence between what was said orally and the printed word”** (Hesse-Biber and Leavy, 2006, p.345). The qualitative data was analyzed by using grounded theory method. **This process involved “generating categories of information (open coding) selecting one of the categories and positioning it within a theoretical model (axial coding), and then explicating a story from the interconnection of these categories (selective coding)”** (Creswell, 2003, p.191). The researcher read these transcripts in their entirety in **order to understand individual teachers’ experiences fully**. Interviews were semi structured, and while the interviews had provided some opportunities for unstructured responses, the interview data was analyzed with the goal of characterizing teacher responses to a key set of interview items (see the interview items in the analysis section) related to the research questions. Thus, after reading all of the transcripts, the researcher focused on pinpointing variables across individual participants that would allow her to better understand the perspectives regarding teaching in cyberspace. The themes emerged during the process of analysis, were supported with existing research studies in the relevant field. Thus the literature was used for **“supplemental validation” for the accuracy of findings or how the findings differ from the published data** (Creswell, 1998, p.209).

Findings

Several themes emerged from the interview transcription. These themes were then grouped together into larger perspectives that provide answer to the qualitative research question related to the challenges facing during online instruction (Creswell & Clark, 2007).

From the analysis, five main categories were derived regarding challenges facing by the instructors of Virtual University of Pakistan in performance driven e-learning:

Hiring of Qualified Professors

In accordance with the instructors’ point of view, highly qualified faculty serves as a crucial component in the success of a university. They told that as the Virtual University is relatively a newly established institution, provision of qualified professors for their students is still seen as a big challenge.

Ms A. K. revealed

Virtual lectures are recorded in advanced English by highly qualified professors (most are PhDs) who are not faculty members of virtual university, and feedback regarding those lectures is given by regular faculty members holding **simple master’s degree**.

Informants were of the view that this phenomenon adds frustration among students and should be controlled. They further proposed that social presence of the instructors should also be ensured. Similar findings were revealed in a **research study by Cobb (2009) who concluded that “social presence remains a key influential component of the quality of the online learning experience from the student perspective, (p.251).**

Guidance and Financial Support to enhance Enrollment

All participants were of the opinion that proper orientation at the time of admission regarding schedule of courses assignment and examination is an important component for success of online courses.

Mr. G.B suggested

There is a need of orientation session at the start of each semester, and especially at the time of admission of students

Consistent with the research findings, Collier and Morse (2010) emphasized the need for instructor-to-student and student-to-student trust prior to major collaborative assignments (p.01).

Instructors were of the view that provision of guidance services during the course and financial support for needy students is also very much crucial in this regard. They believe that if such services are provided, then students will feel a sense of involvement with the instructor and the course. Kupczynski *et al.*, (2010) were of the view that “students believed that they were successful when the instructor intervened in discussions to help them broaden their conceptual horizons and explore new possibilities” (p.32).

Online Communication

Participants revealed that the online teaching format poses challenges to teachers with respect to communication in a virtual environment. All participants of the present study were agreed that due to lack of proper communication, students feel hesitation while asking queries and this phenomenon creates perception differences among students and instructors.

Mr. K.M was of the view

Instructors do not comprehend what their students ask, and in this way many questions are remained unanswered

In accordance with some of the instructors’ point of view, English language is also a major hindrance in frequent contact with instructors. They described that their students belong to that part of youth who do not continue their studies with conventional education system due to either their job responsibilities or vice versa. They further added that their students are not very much competent in English language and cannot use it effectively while communicating with their instructors through e-mail.

Mr. R. A expressed

Most of the students use romans (write Urdu words in English alphabets) while communicating their instructors in e-mails.

They also revealed that many instructors do not show much interest in solving students’ problems. Informants were of the view that the role of instructors is very crucial in this regard. They should welcome their students’ e-mails and respond happily but in actual practice this does not happened.

Paulus, Payne and Jahns, (2009) explained in their study that “before educators can create more learner-centered environments, they need to know more about their learners (p-13). Research evidence proved that an instructor can help students in creating a better learning environment. Bai, (2009) was of the view that “in attempt to promote students’ higher level of thinking in online discussion, instructor needs to let students’ know that they are expected to provide meaningful input and learn the characteristic of such input”, (p-161). Informants were of the view that the role of

instructors is very crucial in this regard. They should welcome their students’ e-mails and respond happily but in actual practice this does not happened. Consistent with the participants’ view, the findings of a research study by Sher (2009) also suggested that

The instructor must encourage students to actively participate in the course discussions; they must provide feedback on students’ work and inform them of their progress periodically; and treat them as individuals. In addition, a learning environment that encourages sharing learning experiences, builds a sense of community among students, and supports teamwork is desirable, (p.116).

Technology Access

The online forum was not viewed by the informants as a valid teaching and learning forum unless an appropriate technology access is provided and the proper training of students for usage of the technology is given.

Mr. S.A expressed in this regard

Virtual education is not possible without high-speed internet services, computer training and continuous provision of electricity

Similar to these findings, another research study by Gahungu, Dereshiwsky and Moan, (2006), also recommended the “need for tutorials in the utilization of special teaching technology features” (p.130). They further added that “features such as “chat-rooms,” “gradebook,” and media were still puzzling them” (p.131).

Lack of persistence among virtual students

Participants were of the opinion that the possibility of withdrawal of virtual students from the system is increased because instructors do not encourage their students and don not give proper feed back to them. This phenomenon increases students’ desperation. Hart (2012) found in his literature review of previous studies regarding online programs that the main factors associated with student persistence in an online program include “increased communication with the instructor” (p-19).

Ms RM. told

Due to continuous disappointment, students’ frustration is increased and ultimately they leave the system. Informants told that dropout is much higher in backward areas

Research evidence also revealed that if students do not feel satisfied with the education system, they cannot continue their studies. Kupczynski *et al.*, (2010) stated “lack of feedback, lack of clarity in instructor comments and confusing or misleading instructions, (p.32) as the main factors regarding dropouts of online courses.

Hart (2012) found in his literature review of previous studies regarding online programs that the main factors associated with student persistence in an online program include “satisfaction with online learning, a sense of belonging to the learning community, motivation, peer, and family support, time management skills, and increased communication with the instructor” (p.19). Consistent with this study finding, Mr. R.S. stated

If instructors do not encourage their students and give proper feed back to them, then the students become desperate and if this continues, the possibility of their withdrawal from the system might be increased

Hart (2012) further concluded that “if persistence factors are not present in sufficient quantity, the student may be at risk of withdrawing from an online course” (p-19).

Conclusion and Discussion

In the analysis of the present study, five main factors emerged regarding challenges facing by the instructors of Virtual University of Pakistan in performance driven e-learning. These factors were hiring of qualified professors, guidance and financial support to enhance enrollment, technology access, online communication and lack of persistence among virtual students. These factors are interlinked and influence each other also. It is a common practice among students that they hesitate to contact freely with their instructors, and this phenomenon results in misconceptions among students and instructors. And also results in risk of withdrawing from online course.

The informants proposed that physical contact of students and instructors and bilingual (using both English and Urdu) e-learning should be facilitated in Pakistan. As they admitted that on-line environment is different from traditional learning environment. Gahungu et al., (2006) also found similar findings that “online classrooms may not be an adequate substitute for face-to-face communication in some subject areas” (p.124). In a virtual mode of instruction, the student and instructor is compelled to contact through e-mail, but for increasing the effectiveness of this program, physical contact of both should be made possible for some occasions. The participants expressed that the success of teaching in cyberspace will be achieved when teachers realize the significance of continuous interaction with students and explaining their assignments clearly.

Finally, all participants believed that virtual learning is an effective mode of learning in the context of a developing country where majority of virtual students are either working professionals or females of remote areas who cannot join traditional learning system for enhancing their capabilities.

Limitations of the Study

This qualitative study explored virtual teachers' experiences in cyberspace. The logic of employing qualitative research is concerned with “in-depth understanding, usually working with small samples” (Hesse-Biber & Leavy, 2006, p.70). The small sample decreases the generalizability of findings (Creswell, 2003) so; the researcher makes no claim that the findings are generalizable to other modes of instruction, other times or to the effectiveness of teaching in cyberspace at other campuses of Virtual University of Pakistan.

Suggestions for the Future Research

E-learning is relatively new the mode of instruction in Pakistan and the present study is said to be a base-line study on the topic of teaching in cyberspace. However, some of the issues emerged during this study were common in traditional mode of instruction as well, such as shortage of highly qualified professors and guidance and financial support etc. A comparative study on these issues between virtual and traditional modes of instruction may provide further insight into effective education practices in higher education.

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