

Teachers' Satisfaction in Virtual Environment of Distance Learning

Naheed Shaban¹, Muhammad Ramzan²

¹ Research Scholar, Superior University Lahore
(Lahore, Pakistan)
Naheedshaban {at} yahoo.com

² Professor, Superior University Lahore
(Lahore, Pakistan)
Mramzan {at} lums.edu.pk

ABSTRACT— *Teachers feel stressed in a distance learning institutes because of isolated environment. They miss face to face interaction. Intuition power is a gift of conventional teaching that lacks in virtual teaching. They choose virtual teaching because of technological transcendence and other career development factors. In teaching, virtual environment is preferred as you don't have to take your office along with you to home. Means you don't have to get prepared for teaching before coming to university. But, in conventional teaching you must have to spare some time at home for preparing lectures, otherwise you cannot face the students.*

Keywords— Distance education, e-learning, teacher's satisfaction, virtual environment

1. INTRODUCTION

Distance learning is not a new idea of getting education, it started centuries ago through postal services. With the passage of time distance education changes its shapes and now a days it has taken the form of e-learning where teachers and students met together with the help of scientific equipment for the sake of knowledge and for the delivery of knowledge respectively. (Berge & Collins, 1995) Different methods and strategies are adopted for this purpose. Internet and computer plays a pivotal role in the process of e-learning. Some other technologies (software) are also helpful for the successful delivery of online lecture and making student understands the concepts and to communicate with the teacher. (McDonald, 2003) Maximum number of students can get enrolled in one session than conventional type of learning where there is opportunity for only few students.

A virtual platform is used by the virtual institutes where students interact with a teacher with the help of internet to send their queries and to submit their regular assignments. Students can send their routine problems through e-mail and subject related problems through the specific platform available for the discussions regarding lectures and assignments. (Martín-Blas & Serrano-Fernández, 2009) Teachers adopt different techniques to get involved their students to studies by giving them tips for studies and different type of announcements that help them to get in touched with their current class matters.

Delivering the knowledge at the distance of hundreds of miles (virtual environment) is not an easy task. You have to make effort to meet the expectations of the students. (O'Malley & McCraw, 1999) But with all this the most important thing is that the expectations of the teacher are met as well. Teacher is the main character of the play; if he is not satisfied he/she cannot deliver the quality education to the students (Johnson, Aragon, & Shaik, 2000). There are different factors that affect the satisfaction level of the teacher. These may be student related factor, institute related factors and personal factors etc.

Faculty satisfaction is an important factor to achieve quality work along with student satisfaction. (Bolliger & Wasilik, 2009).

2. LITERATURE REVIEW

Few decades back the term virtual organization was introduced although it did not get much attention. But with the rapid growth of internet and computers the term becomes known to every one till 1990s. First virtual organization was introduced in early 1980s. A virtual organization is a group of independent geographically scattered organizations that work together for a common purpose that interconnected through some network. This concept is also explained by (Jägers, Jansen, & Steenbakkens, 1998), according to him "a Virtual Organization is an institute consists of independent individuals or units, who work together with the help of information and communication technology. They combine their

core competencies to achieve target as a single unit.

Distance learning is defined by (Lynch, 2001) as a setup where students and teacher are separated by time and sometimes by distance. Students and teachers met virtually in a distance education environment and create an atmosphere of learning. If we eliminate the boundaries of time and geography in the activity of learning, it becomes distance learning. It is a process by which students interact with teachers without the boundaries of time and geography. A student can interact with his teacher any time anywhere (Bolliger & Wasilik, 2009). Students getting benefit from the e-learning institutes are more than the conventional universities because of the method and techniques applied for the delivery of knowledge. This technique is supporting thousands of student at one time in one session and in one class. Geographic dispersion is one of the main characteristic of virtual institutes. These institutes are interconnected through internet. TV channels help these institutes to deliver the lectures at one time at different locations. Students can purchase the CDs of the lectures to watch the lectures (Jonassen, 2000). Internet is used to communicate directly with the fellow students and to ask lectures related questions instantly through e-mails and through (LMS) Learning Management System (an interface available for the direct communication of the teachers and students).

Quality of the education is important for the sake of satisfaction of the student regardless of the channels through which the education is delivered. In fact online teaching is considered better than the traditional learning if learning styles are designed effectively. It means if learning takes place with reasonable access of information, good quality of material and communication styles then it would be considered better than the traditional learning (Restauri, 2006).

Number of hurdles or difficulties students have to face during online learning; these could be related to social, academic, administrative, technical and motivational issues as it has been reported by (Muilenburg & Berge, 2005) students has to face variety of barrier in online learning that may be of administrative, social, technical and of academic nature.

Confidence of the student leads to the success of the student. He must be ensured that they are getting quality education in online environment (Allen & Seaman, 2010). Student's satisfaction is an important factor that leads to the faculty satisfaction. There is strong correlation between faculty satisfaction and student satisfaction (Wasilik & Bolliger, 2009).

With the passage of time online education has become popular due to the easy access and therefore, is considered important component of higher education. Because distance education has no boundaries, many institutions are offering courses that can be accessed by global learners.

There are different factors that affect the satisfaction level of teachers. Some include personal factors, institutional factors, monetary benefits and social benefits. All these come together to build up the satisfaction of the teacher that could motivate him/ her to work in a particular environment. Satisfaction of a teacher related to some personal and institutional factors as well. Personal factors may include fringe benefits, rewards and salary; along with encouragement and appreciation from the seniors along with good feedback from students and co-workers. Good environment also contribute the higher level of satisfaction. This concept has been discussed by (Sabharwal & Corley, 2009), who says that motivators, demographics and environment contribute the satisfaction level of the teachers.

Although all these factors have an impact on the satisfaction level of a teacher here we want to know which of these have closer and deep impact on the satisfaction of the teacher.

3. PURPOSE OF THE STUDY

1. To examine the factors that lead to teachers' satisfaction in virtual environment of distance learning.
2. To find the relationship between these factors.

3.1 HYPOTHESIS

H₀: Is there NO significant relationship between the satisfaction level of the teachers and the factors that contribute to that satisfaction?

H₁: Is there significant relationship between the satisfaction level of the teachers and the factors that contribute to that satisfaction?

4. DATA COLLECTION

We have collected data through a researcher-developed questionnaire sent by e-mail entitled "Factors Affecting Job Satisfaction in Virtual Environment of Distance Learning". For the sake of data desired research participants were asked if they are satisfied by doing work in virtual environment. Questionnaire was sent to more than 100 teachers. There are

about 150 teachers in the department but only 50 teachers fill the questionnaire. Data collected randomly without gender discrimination.

4.1 INSTRUMENT USED FOR DATA COLLECTION

As discussed above 50 teachers responded the sent questionnaire. Questionnaire consists of different items. Different questions have been asked related to virtual environment. Different aspects have been explored regarding satisfaction of the teachers. As we have mentioned in literature review that different authors have mentioned that teachers satisfaction is combination of different aspects like student related factors, environmental or institute related factors and personal factors. But here for analysis purpose we will consider only those factors that directly hit the satisfaction of a teacher and these are mostly consist of personal factors and environmental factors. Virtual environment is considered here as an independent variable.

Questionnaire was adopted and changed as per the requirement of the research Shown in (Bolliger & Wasilik, 2009) Appendix A. Final questionnaire was consisting of 34 items. All items of the questionnaire were bifurcated as per the criteria allocated for the research question. There were basically three types of the factors as per the literature review that leads to the satisfaction level of the teachers in a virtual environment. These factors are personal factors, job related factors and institution related factors. Demographic items were gender, age, years of experience, marital status and current salary.

A five point Likert scale was used to collect the data. The points on the scale were 5 = SA (Strongly Agree), 4 = A (Agree), 3 = Neutral 2 = D (Disagree) and 1 = SD (Strongly Disagree).

5. DISCUSSION GENERATION

After reading the literature review we come to know that basically there are four variables that have relationship with each other. Here we are concerned about teacher satisfaction. There are different factors that cause to increase or decrease the satisfaction level of a teacher. These factors are grouped as personal factors, job related factors and student related factors.

5.1 TEACHER'S SATISFACTION

First of all those traits are explained here due to which we can say that teacher's satisfaction is affected. These are multiple factors like, Interaction, face to face contact and control on student and their feedback regarding the performance of the students that may lead to change the satisfaction of a teacher. Interaction with students gives the feedback regarding what have been taught as well as it is a barometer to check the caliber of the students.

Intuition is the main characteristic of a conventional teaching that happens only in face to face teaching. Student asks some question that is replied promptly. This thing enhances the knowledge. This item is a strong characteristic of conventional teaching, while virtual teachers miss that sanctification that is only a gift of live class room teaching.

It happens only once in a session when a virtual teacher met with their student at the time of final viva voce. There is no other face to face interaction with the student in an online teaching. This thing discourages the motivation of a teacher.

A teacher feels proud and satisfied if he or she has a control over his/ her students. If a teacher is not in a position that his/her presence does not make any difference, this is an alarming situation for the ego of a teacher.

Teachers feel happy when he or she is sure that his /her students can access the course anywhere any time. In a traditional setting it is easy to observe the students directly and guide them as per their needs and interests but it is quite difficult to motivate the student in an online setting.

Online teaching is a pleasing in many aspects; a teacher wants to carry that job when it is a congenial job, when technical problems and stress do not shake confidence as a teacher. And he is quite smart to handle these complications. Online teaching is considered preferable as compare to traditional teaching in a way that it takes longer to prepare for a course. For a one hour lecture it requires two hours of preparation to deliver lecture conventionally. But it is quite easy and relaxing when a teacher is sitting behind the screen and someone else is there to deliver the lecture or when pre-recorded lectures are available for students. So it takes less efforts and time to answer students in an online setting.

5.2 PERSONAL FACTORS

Personal factors are those stimuli that effect to increase or decrease the teacher satisfaction. Creativity (in terms of the resources used for online courses) enhances the confidence of a teacher that how he explores the ideas how he think out of the box to use the available resources. If a teacher is frustrated because he don't know that how to handle technical problems this may leads to decrease the satisfaction. A teacher feels proud when he is assured that he can fulfill the duties of a challenging job, he is earning enough money and he has experience in his profession. All these things lead to

increase the satisfaction level of a teacher. If a teacher feels that he is not in the position to fulfill his job responsibilities it is quite frustrating for him and leads to anxiety attacks.

5.3 JOB RELATED FACTORS

These are some particular characteristics of doing job in a virtual environment that lead to increase or decrease the satisfaction level of a teacher. Online environment is a flexible environment, teacher is not bound to take class at a particular time, and he has not to reply promptly to students. There is always a time gap between students and a teacher created by the environment that plays an important role for the relaxation of the teacher. Teacher incorporates fewer resources for the preparation of the subject. He does not have to go here and there for the sake of the books and the helping material. Most of the things are available online for the help of a teacher. Online teaching uses a reliable technology. Work load given to an online teaching is more than a conventional teaching. A conventional teacher handle approximately hundred students in one time while an online teacher can handle thousands of students at one time just because of a reliable modern technology.

5.4 FACTORS RELATED TO STUDENTS

Now in the end we are going to discuss the factors related to students that may increase or decrease the satisfaction level of teachers.

A teacher feels good if he got prompt response from the students. Two way communication leads to learning. Active students are blessing for a teacher, passive students make the teacher nil. When a student put a question it opens new horizons for ideas and expands the vision of teacher and student as well. All these factors also contribute to increase and decrease the satisfaction of a teacher.

6. RESULTS

CORRELATIONS						
			Teacher satisfaction	Personal factors	Job related factors	Student related factors
Spearman's rho	Teacher satisfaction	Correlation Coefficient	1.000	.633**	.487**	.417**
		Sig. (2-tailed)	.	.000	.000	.002
		N	51	51	51	51
	Personal factors	Correlation Coefficient	.633**	1.000	.462**	.272
		Sig. (2-tailed)	.000	.	.001	.054
		N	51	51	51	51
	Job factors	Correlation Coefficient	.487**	.462**	1.000	.362**
		Sig. (2-tailed)	.000	.001	.	.009
		N	51	51	51	51
	Student factors	Correlation Coefficient	.417**	.272	.362**	1.000
		Sig. (2-tailed)	.002	.054	.009	.
		N	51	51	51	51

** . Correlation is significant at the 0.01 level (2-tailed).

6.1 ANALYSIS

Following are the factors that have been taken to find the correlation between the factors:

- Teacher’s satisfaction
- Personal factors

- Job related factors
- Student related factors

A correlation test was applied in SPSS to find the relationship between the factors. We choose Spearman rank correlation because of the ordinal data. Basically we want to know about the factors that have close relationship with the teachers satisfaction therefore, we will consider the relationship of teachers' satisfaction with job related factors, student related factors and personal factors. Here we find $r_s = 0.633$ between teacher's satisfaction and personal factors leading to teacher's satisfaction that mean there is relationship of moderate level. But the moderate level is too high that it value is near to strong relationship. $r_s = 0.487$ between teacher's satisfaction and job related factors and $r_s = 0.417$ between teacher's satisfaction and student related factors.

Hence we find from the results that among all factors there is strong correlation between the teacher's satisfaction and personal factors. All other factors are closely related but the correlation is of moderate level.

All the results were significant means there is minor chance that the results are not true. The value of p (*rho*) is supporting to reject the null hypothesis. Hence it is significant correlation between the desired factors.

7. CONCLUSION

Real time data has been collected from the teachers working at Virtual University of Pakistan. That is the first institute in Pakistan who deliver education through internet. There are hundreds of people who are directly or indirectly engage in the delivery of knowledge beyond the boundaries. Results of the data reveal the contentment of the teachers working in virtual environment. Although it is the first institute of Pakistan that is delivering knowledge with the help of the modern technology, people getting handsome salary but still restlessness is present because, teachers feel isolated in virtual environment. They have anxiety attacks when they think of going back to work. Technical and challenging job gives them the feeling of proud that they are adding value to education. This is the only institute in Pakistan under Ministry of Information Technology which is working for distance learning with the help of modern technology, this particular trait is contributing towards increasing the satisfaction of the teachers. This is a unique teaching where your experience can help to assist students. A teacher don't have to take his office along with him to home, he can come without preparation for teaching as he don't have to interact directly with students. A time gap is available, that is a relaxing factor for a teacher. Here people are satisfied employees but there satisfaction is more contingent to satisfaction of personal factors.

8. ACKNOWLEDGEMENT

The authors wish to thank the anonymous referees for their helpful comments. Our paper improved after making corrections and adaptations according to referee's guidelines.

9. REFERENCES

- [1] Allen, I. E., & Seaman, J. (2010). Learning on Demand: Online Education in the United States, 2009: ERIC.
- [2] Berge, Z. L., & Collins, M. P. (1995). Computer mediated communication and the online classroom: distance learning: Hampton Press Cresskill.
- [3] Bolliger, D. U., & Wasilik, O. (2009). Factors influencing faculty satisfaction with online teaching and learning in higher education. *Distance education*, 30(1), 103-116.
- [4] Jägers, H. P. M., Jansen, W., & Steenbakkens, G. (1998). Characteristics of virtual organizations: Universiteit van Amsterdam, Department of Information Management.
- [5] Johnson, S. D., Aragon, S. R., & Shaik, N. (2000). Comparative analysis of learner satisfaction and learning outcomes in online and face-to-face learning environments. *Journal of interactive learning research*, 11(1), 29-49.
- [6] Jonassen, D. H. (2000). 24. Learning With Technology: Using Computers As Cognitive Tools.
- [7] Lynch, M. (2001). Effective student preparation for online learning. *The Technology Source*, 6.
- [8] Martín-Blas, T., & Serrano-Fernández, A. (2009). The role of new technologies in the learning process: Moodle as a teaching tool in Physics. *Computers & Education*, 52(1), 35-44.
- [9] McDonald, J. B. (2003). Teaching and Learning with Technology.
- [10] Muilenburg, L. Y., & Berge, Z. L. (2005). Student barriers to online learning: A factor analytic study. *Distance education*, 26(1), 29-48.
- [11] O'Malley, J., & McCraw, H. (1999). Students perceptions of distance learning, online learning and the traditional classroom. *Online journal of distance learning administration*, 2(4).

- [12] Restauri, S. L. (2006). Faculty-student interaction components in online education: What are the effects on student satisfaction and academic outcomes. *Dissertation Abstracts International*, 67(01), 602.
- [13] Sabharwal, M., & Corley, E. A. (2009). Faculty job satisfaction across gender and discipline. *The Social Science Journal*, 46(3), 539-556.
- [14] Wasilik, O., & Bolliger, D. U. (2009). Faculty satisfaction in the online environment: An institutional study. *The Internet and Higher Education*, 12(3), 173-178.

APPENDIX A

Questionnaire

Factors Affecting Job Satisfaction in Virtual Environment of distance learning

PLEASE DO NOT OMIT ANY ITEM.

INSTRUCTIONS: Please read carefully and tick your response.

Gender	Male	Female	
Age	Below 35	Above 35	
Marital status	Single	married	
Years of experience	Less than 5 years	More than 5 years	
salary	Less than 50,000	More than 50,000	

SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree, Neutral = 0

		SA	A	N	D	SD
1	The level of my interactions with students in the online course is higher than in a traditional face-to-face class.					
2	The flexibility provided by the online environment is important to me.					
3	My online students are actively involved in their learning.					
4	I incorporate fewer resources when teaching an online course as compared to traditional teaching.					
5	The technology I use for online teaching is reliable.					
6	I have a higher workload when teaching an online course as compared to the traditional one.					
7	I miss face-to-face contact with students when teaching online.					
8	I do not have any problems controlling my students in the online environment.					
9	I look forward to teaching my next online course.					
10	My students are very active in communicating with me regarding online course matters.					
11	I appreciate that I can access my online course any time at my convenience.					
12	My online students are more enthusiastic about their learning than their traditional counterparts.					
13	I have to be more creative in terms of the resources used for the online course.					
14	Online teaching is often frustrating because of technical problems.					
15	It takes me longer to prepare for an online course on a weekly basis than for a face-to face course.					
16	I am satisfied with the use of communication tools in the online environment (e.g., chat rooms, threaded discussions, etc.).					
17	I am able to provide better feedback to my online students on their performance in the course.					

18	I am more satisfied with teaching online as compared to other delivery methods.					
19	My online students are somewhat passive when it comes to contacting the instructor regarding course related matters.					
20	It is valuable to me that my students can access my online course from any place in the world.					
21	The participation level of my students in the class discussions in the online setting is lower than in the traditional one.					
22	My students use a wider range of resources in the online setting than in the traditional one.					
23	Technical problems do not discourage me from teaching online.					
24	I receive fair compensation for online teaching.					
25	Not meeting my online students face-to-face prevents me from knowing them as well as my on-site students.					
26	I am concerned about receiving lower course evaluations in the online course as compared to the traditional one.					
27	Online teaching is gratifying because it provides me with an opportunity to reach students who otherwise would not be able to take courses.					
28	It is more difficult for me to motivate my students in the online environment than in the traditional setting.					
29	I have anxiety attacks when I think of going to work.					
30	My job is too frustrating for me.					
31	The stress on my job reduces my confidence as a teacher.					
32	I feel challenged in my job as an experienced teacher.					
33	I need support of experienced colleagues for the fulfillment of my job activities.					
34	I need pre-service experience for the fulfillment of job responsibilities					

APPENDIX B

CORRELATIONS						
			Teacher satisfaction	Personal factors	Job related factors	Student related factors
Spearman's rho	Teacher satisfaction	Correlation Coefficient	1.000	.633**	.487**	.417**
		Sig. (2-tailed)	.	.000	.000	.002
		N	51	51	51	51
	Personal factors	Correlation Coefficient	.633**	1.000	.462**	.272
		Sig. (2-tailed)	.000	.	.001	.054
		N	51	51	51	51
	Job factors	Correlation Coefficient	.487**	.462**	1.000	.362**
		Sig. (2-tailed)	.000	.001	.	.009
		N	51	51	51	51

	Student factors	Correlation Coefficient	.417**	.272	.362**	1.000
		Sig. (2-tailed)	.002	.054	.009	.
		N	51	51	51	51

** . Correlation is significant at the 0.01 level (2-tailed).