



## Difference between Traditional and Non-traditional Learning Methods in Virtual and Real-world Environment

Khalid Iqbal<sup>1</sup>, Saima Afzal<sup>2</sup> and Muhammad Rafiq<sup>3</sup>

### Abstract

*The advancement of information and communication technology in 21<sup>st</sup> century is introducing new way of learning. The physical classroom learning method is very effective and a prevailing type learning. The main objective of the study was to explore the impact of non-traditional method of education in undergraduates. The main objective was to study the general impact of traditional learning method among students. The researcher had used the social survey method of research for data collection and researcher had used simple random sampling. The researcher had selected 60 respondents from Bahauddin Zakariya University Multan and 40 respondents from Virtual university Multan campus. Online learning saves time 88.3% real class students said that yes it saves time and 92.5% virtual learners agree that it saves time. The online learning reduced the dependency of place 70% traditional students were agreed this and 80% virtual students said that it reduced the dependency of place. Virtual learning is beneficial for both learning and job together 80% traditional students said yes, it is beneficial for both and 90% virtual students had also same views. Recently, use of information communication technology has been increased in our educational institutions. Due to this advancement in technology has made physical and virtual learning more effective for learners.*

**Key Words:** Virtual learning, non-traditional, traditional, information technology

### 1 Introduction

Development of information and communication technologies has provided different learning methods and made computer-generated education an important tool of learning. *The physical classroom learning method is very effective and a prevailing type learning* (Lukman and Krajnc., 2012). Instructors can make learning more effective by using technology. The main benefit of online learning is that there is no limitation of time and space for students (Nicholas, 2014). Virtual learning is the most enriching and dynamic forms of knowledge's acquisition which has reduced the dependency of time and space. Online education is facing challenge to make ensure students interaction. Similar interaction is found in tradition education (Guri-Rosenbit, 1999; Pallof and Pratt, 1999). From the last decade, use of 3D is growing in virtual environment as compared to traditional system (Dickey, 2003). Although use of technology in higher education classrooms is good thing but there is need to

<sup>1</sup> BS Student, Department of Sociology, The Bahauddin Zakariya University, Pakistan.  
Email: khalidiqbal0300@gmail.com

<sup>2</sup> Corresponding Author and Assistant Professor, Department of Sociology, The Bahauddin Zakariya University, Pakistan. Email: saimaafzal@bzu.edu.pk

<sup>3</sup> MSc student, Department of Sociology, The Government College University, Layyah, Pakistan.  
Muhammadrafiq5284@gmail.com

understand the issues which occur in learning environment than user learn critical thinking (Harasim, 1990). The learning environment of virtual team is effective in learning result which support to learning activities (Hiltz, 2000). The non-traditional have developed their unique identity and they have both experience of life positive and negative (Shaw et al, 1999). Many non-traditional learners are not proper socialized from their past education and home environment (Jones et al, 2003). Non-traditional learners have influence of life events as graduation, death, marriage, divorce and others issues also impact on the learner. The non-traditional learner has great stress of life crises (Kegan, 1982). Each student has developed a unique method of learning according to his/her learning style (Xu et al., 2014). Day by day use of 3D in virtual environment is increasing. 3D virtual environment improves communication, collaboration and support in decision making (Fumarola and Poelman, 2011). Popularity of virtual world environment attract to real world to join new world (Belisle and Boudr, 2011).

## **2 Literature Review**

Daley et al (2001) have focused on their research to find out the learning process which adult students use in the advancement of technology environment. The instructors had concluded that technology has saved time and energy of students. Virtual learning also can give benefits to teachers because through online methods teacher would not pay full attention on their students.

Parkinson and Husdon (2002) collected the data by using questionnaires and personal interviews from the students as well as teachers' views. The researcher finds that use of technology encourages new comers to participate in group learning. Because technology-based learning has provided and interactive environment to learn through digital channel. This method is also suitable for teachers to teach students through multimedia in classroom.

Andrews and Schwarz (2002) collected the both qualitative and quantitative data by using questionnaires and the main objective of the research was to find out the development of learning behavior of students. This research based on the innovations of technology in the teaching environment. In addition, teacher role is considered very significant in virtual classroom. This research shows the behavior of knowledge which is related to the presentation of team, and the performance of the team can be positive and negative. Different kinds of learning activities appeared at the different kinds of online learning. The findings of the study also show problems which have impact on the progress of learning behavior.

Lukman and krajnc (2012) focused on her research to find out the difference between the non-traditional learning methods and traditional learning method in both environments. The classroom learning environment provide mutual communication among students and teacher and build confidence in students. The cooperation among student and teachers makes learning environment more attractive for both students and teachers.

Monahan et al (2001) focused on their research to evaluate the acceptance of technology and collected the data by using questionnaire. In developing countries, the main problem is noticing the acceptance of technology by some teachers. The instructor should show their interest in virtual learning because without teachers' acceptance of technology quality of learning is not possible.

Nelson (2007) focused on his research to identify the general impact of virtual environment on students. The main disadvantages of virtual learning are that it creates gap among students' performance and their expectations. Computer based guidance is a factor

that create gap among the expectations and results of the students. The students and teachers in higher educational institutions should be aware of technology. Its technology which enhance teachers' abilities and provide new attractive methods of teachings.

Choi and Baek (2011) focused on the research to find out the characteristics of technology factor which have influence in virtual worlds through learning, and collected the data by using questionnaire. The advancement of technologies has strong impact on the education system. The findings of the study depict that use of multimedia is beneficial for classroom learning. Because through this method students can pay more attention on their learning.

### **3 Research Methodology**

The researcher had used survey technique of research for the data collection to explore the difficulties faced by undergraduates using old-style and untraditional learning method. Data was collected through self-administered structure questionnaire. As a research instrument questionnaire was filled in by the respondents during face-to-face meeting. Students of Bahauddin Zakariya Multan and Virtual University Multan campus were respondents of this research. The sample of the study was comprised all students of Bahauddin Zakariya university Multan and all students of Virtual University Multan.

### **4 Results and Discussion**

**Table1**  
*Characteristics of Respondents*

Age	Below 20	10%
	Above 20	90%
Residence	Rural	47%
	Urban	53%
Family income	10000-30000	44%
	40000-60000	35%
	70000-90000	9%
	100000-120000	12%
Family type	Nuclear	49%
	Joint	51%
Father occupation	Worker	40%
	Employee	38%
	Business man	22%
Previous education	Traditional	99%
	Virtual	1%
Marital status	Single	89%
	Married	11%

Questionnaires were filled by 60 traditional class students and 40 questionnaires were filled by online class students. The 10% respondents which have participated in this research had below than 20 years age. 47% participant of this research had rural residence. Only 9% students which were participant of this research had 70000-90000 family income from all resources. 49% respondents belong with the nuclear family system. Only 22% students from 100 father occupation were own business. Only single student has virtual learning from previous education. A remarkable only 11% participant of this research respondents were married students.

**Table 2**  
*Responses to First Question*

1 <sup>st</sup> question: online learning saves time		
Answer Class	Yes	No
Real	88.33%	7.5%
Virtual	92.5%	11.66%

The first question was asked about online learning saves time 88.3% real class students said that yes it saves time 7.5% students said that it did not save time and 92.5% virtual learners agree that it saves time but 11.66% students did not agree. Franceshi et al. (2000) also claimed that virtual learning also reduced the dependency of time. Both real and virtual most of the students said that online learning saves time. And this type of learning is particularly useful for job holder people, because these types of students cannot attend regular classes of traditional learning.

**Table 3**  
*Responses to Second Question*

2 <sup>nd</sup> question: virtual learning reduced the dependency of time		
Answer class	Yes	No
Real	70%	30%
Virtual	80%	20%

And 2<sup>nd</sup> question was asked about the online learning reduced the dependency of place 70% traditional students were agreed this but 30% students did not agree and 80% virtual students said that it reduced the dependency of time and 20% students it did not reduced time. Peat (2000) also claimed that virtual learning reduced the dependency of space and time. Because time is not hurdle in students learning they can study anytime when they feel easy. On the other hand, traditional learning required specific time and place for learning. It is the major benefit of the virtual learning. Students can hear their lectures at any time at any place.

**Table 4**  
**Responses to Third Question**

3 <sup>rd</sup> question: virtual learning beneficial both job and learning together		
Answer Class	Yes	No
Real	80%	12%
Virtual	90%	10%

The 3<sup>rd</sup> question tries to identify the views of respondents about virtual learning is beneficial for both learning and job together 80% traditional students said yes but 12% said it is not beneficial for both and 90% virtual students yes, it is beneficial and 10% students' views did not match. Peat (2000) also claimed that virtual learning is beneficial for both job and learning together. Because this learning did not require proper time for learning so it is more beneficial for job holder people. Both type of learning has their own merits and demerits. But majority of real and virtual students agree that it is more beneficial for both job and learning together.

**Table 5**  
**Responses to Fourth Question**

4 <sup>th</sup> question: online education becoming alternative to traditional learning		
Answer class	Yes	No
Real	50%	50%
Virtual	62.5%	37.5%

The 4<sup>th</sup> question was that online learning becoming alternative to traditional learning 50% real students said yes and 50% students does 'not agree to this and 62.5% virtual students argues that it is becoming alternate to traditional learning and 37.5 % said that it's not becoming alternative to traditional learning. Paik et al. (2004); Jokela (2003) also claimed that online learning become alternative to traditional learning. Because due to development in communication technology virtual learning is also becoming more popular. Another benefit of virtual learning is that it reduced the dependency of time and place together. In online learning there is no restriction of time and place because lecture is delivered through email and is given in flash to students. So, this method gives an opportunity to students to get higher education.

**Table 6**  
*Responses to Fifth Question*

<b>5<sup>th</sup> question:</b> adult learning is more possible in virtual environment		
Answer class	Yes	No
Real	73.3%	21.6%
Virtual	77.5%	22.5%

5<sup>th</sup> question asked that adult learning is more possible in virtual environment 77.5% virtual and 22.5% students said that it's not possible and 73% real class students said that yes, it is more possible in virtual learning environment but 21.6% said that it's not possible. Because it is more suitable and beneficial to students who are doing any job or other business. Therefore, in virtual learning students can give more time to their family. Some adult has responsibility to their families so they have run their learning and together.

**Table 7**  
*Responses to First Question*

<b>6<sup>th</sup> question:</b> virtual learner feels more confident than traditional learner			
Answer class	Agree	Neutral	Disagree
Real	61.6%	18.3%	19.9%
Virtual	52.5%	25%	22.5%

6<sup>th</sup> question was asked about virtual learner feel more confident than traditional learner 61.6% students agree and 18.3% students were neutral and 19.9% strongly disagree from real class students and 52.5% just agree and 25% were neutral and 22.5% disagree from virtual learning students. Loureiro and Bettencourt (2014) also claimed that virtual learner feels more confident than traditional learner. They suggest that teacher should adopted digital strategies for teaching and learning should not be confined to just classroom. Because they did not feel any hesitation to say something to teachers.

**Table 8**  
*Responses to Seventh Question*

<b>7<sup>th</sup> question:</b> online learning creates attractive learning behaviors			
Answer class	Agree	Neutral	Disagree
Real	73.3%	15%	11.6%
Virtual	67.5%	17.5%	15.0%

7<sup>th</sup> question was asked about online learning create attractive leaning environment 73% agree and 15% were neutral and 11.6% students disagree from real classroom students, and from the virtual class 67% students had agree and just 17.5% students were neutral and 15% students disagreed that online learning create attractive learning behaviors. Graham (2001) also claimed that online learning develops learning behavior in students. Salman (2000) also argues that online learning creates attractive learning behavior. Therefore, those students who are interesting to use internet feel more attractive to virtual learning. Because through online learning lecture are delivered through email, Skype, videos clip etc. virtual learner this learning method very attractive.

**Table 9**  
*Responses to Eighth Question*

<b>8<sup>th</sup> question:</b> popularity of wireless communication is result of virtual reality			
Answer class	Agree	Neutral	Disagree
Real	59.9%	33.3%	6.6%
Virtual	75%	20%	5%

8<sup>th</sup> question was asked about popularity of wireless communication is a result of virtual reality 59.9 agree and 33% were neutral and 6.6 disagree of traditional classroom students and 75% agree and 20% were neutral 5% disagree of virtual class students. Lee (1990) claimed that popularity of wireless communication is a result of virtual reality. Because day by day popularity of wireless communication is increasing. In this way virtual learner are encouraged to learn more.

**Table 10**  
*Responses to Ninth Question*

<b>9<sup>th</sup> question:</b> virtual reality is successful in entertainment			
Answer class	Agree	Neutral	Disagree
Real	70%	23.3%	6.6%
Virtual	65%	27.%	7.5%

9<sup>th</sup> question was asked about virtual reality is successful in entertainment world 70% agree and 23.3% were neutral about this and 6.6% disagree from real class students and 65% agree and 27% students were neutral of virtual class and 7.5% were disagree. Burdea and Coieffet (2003) also claimed that virtual reality is successful in entertainment world. Because during learning through online method learner see some videos clip and reads any advertisement which is showing on the laptop/computer screen.

## Social impacts

Old-style learning has the benefit of face-to-face interaction because someone can communicate their problem more efficiently than through email or other source of communication. Some students feel that online learning is most beneficial than traditional learning because it saves time and money. Traditional instructors do not have knowledge how use technology and they did not accept technological innovation. Mostly students of online learning feel the deficiency of face-to-face interaction because they said that we complete our degree but we did know our teacher. Attitudes and perceptions of students play significant role for the learning in a technology enhanced environment.

## 5 Conclusion

The uses of technology increase in the educational fields of education are increasing with the passage of time. Technology also has influenced the education system and provides new ways of learning. Nowadays use of multimedia more attract students to learning and enhance the knowledge. Both types of learning have their own merits and demerits.

## 6 Suggestions

1. Govt should provide facilities of information communication technology in all educational institutions across the Pakistan.
2. Educational institutions should offer both kind of learning methods to students.

## References

- Anderson, J. R., Corbett, A., Koedinger, K. R., and Pelletier, R. (1995). Cognitive tutors: lessons learned. *Journal of the Learning Sciences*. 4(2): 167–207.
- Andrews, T. and G. Schwarz.2002.Preparing students for the virtual organization: an evaluation of learning with virtual learning technologies.*Educational Technology & Society*. 5(3):54-65.
- Beomkyu, C and B. Youngkyun.2011.Exploring factors of media characteristic influencing flow in learning through virtual worlds.*Computers &Education*.57(2011):2382–2394.
- Daley, J. B. and K. Watkins and S. Wall Williams and B. Courtenay and M. Davis and D. Dymock.2001.Exploring Learning in a Technology-Enhanced Environment.*Educational Technology & Society*.4(3):126-138.
- Dede, C., Ketelhut, D. J., and Reuss, K. (2003) Motivation, Usability, and Learning Outcomes in a Prototype, Museum-based Multi-User Virtual Environment. Paper presented at the Fifth International Conference of the Learning Sciences.
- Hrastinski, S. (2007).Participating in synchronous online education.Ph.D. Thesis, Department of Informatics, Lund University, Sweden.
- Jokela, P. (2003). Peer-to-peer learning – An ultimate form of e-learning.In Proceedings of world conference on e-learning in corporate, government, healthcare, and higher education (ELEARN 2003) (pp. 1624–1631).
- Kirschner, P. A., Sweller, J., and Clark, R. E. (2006). Why minimal guidance during instruction does not work: an analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist* 41(2): 75–86.



- Kreijns, K., Kirschner, P., & Jochems, W. (2003). Identifying the pitfalls for social interaction in computer-supported collaborative learning environments: A review of the research. *Computers in Human Behavior*, 19, 335–353.
- Lukman, R. and M. krajnc. 2012. “exploring non-traditional learning methods in virtual and real worlds environments”. *Educational technology & society*. 15(1):237-247.
- Lin, T. J. and Lan, Y. J. 2015. “Language Learning in Virtual Reality Environments: Past, Present, and Future”. *Educational Technology & Society*. 18(4): 486-497.
- Monahan, T. and G. McArdle. and M. Bertolotto. 2008. “Virtual reality for collaborative e-learning”. *Computers & Education*. 50(2008):1339-1353
- Nelson, C. B. 2007. “Exploring the Use of Individualized, Reflective Guidance In an Educational Multi-User Virtual Environment”. *Journal of Science Education and Technology*. 16(1):2007- 2006.
- Parkinson, B. and H. P. 2002.* “Extending the learning experience using the Web and a knowledge-based virtual environment”. *Computers & Education*. 38(2002):95-102.
- Rickel, J., and Johnson, W. L. (1999). Animated agents for procedural training in virtual reality: perception, cognition and motor control. *Applied Artificial Intelligence* 13: 343-382.