

A Study of Communication Barriers in Open Distance Learning System of Education

Samra Anjum¹
Rahmat Ullah Bhatti²
Muhammad Javed Iqbal³

Abstract

Communication transmits information, ideas and feelings from one person to another. But there are certain barriers which restrict the people's expression. These are social barriers, cultural barriers, temporal barriers, technical barriers, psychological barriers, contextual barriers and collaboration barriers. Therefore, present study was designed (i) to explore the communication barriers faced by learner in distance education and (ii) to find out the effects of these communication barriers on achievement of distance learners. Stratified random sampling technique was used to select 380 M.Ed students from the five main regions of Allama Iqbal Open University. All the Academia of Faculty of Education, all the Regional Heads and 300 tutors of M.Ed program were included in the sample. Four questionnaires based on five-point Likert scale were used for data collection. Data were analyzed through mean score and standard deviation. It was concluded that distance learners faced challenges in communication which affect the achievements of distance learner. It was recommended to provide better communication facilitates to the distance learner through digital support services. Quality students support services can improve the communication process. Accessibility of internet and social media networking should be ensured atleast in study centers. Moreover, group interaction through tutorial and social media should be established.

Keywords: Communication barriers, Distance learners, support services, internet, social media.

¹ M.Phil scholar, Allama Iqbal Open University Islamabad. Email: a3009281507@gmail.com

² Assistant Professor, Department of Early Childhood & Elementary Teacher Education, Allama Iqbal Open University Islamabad. Email: rehmat.ullah@aiou.edu.pk

³ Chairman Department of education, Mohi-ud-Din Islamic University Nerian Sharif, Azad Jammu and Kashmir. Email: javediqbal1941@yahoo.com

Introduction

Distance education is a special mode of teaching which requires effective communication between teacher and learner. As learners and teachers are far apart from each other; therefore, special arrangement is made in the institutions established for this purpose (Moore & Kearsley, 2012). Distance may be physical, pedagogical and social or cognitive. Cognitive distance is referring to how homogeneous students are amongst themselves. More cognitive distance becomes a barrier in concept development through discussion. (Mumsch & Wilson, 2003). Pedagogical distance is disconnect between prescribed curriculum and its implementation in the classroom by the teacher. While physical distance is geographical distance between learner and teacher (Pereira, Lisbon & Löhms, 2005).

Transfer from correspondence way to web-based systems and telecommunication systems in distance learning has created complications. Some of these are need of training and guidance in online context, unawareness of new technology, lack of satisfactory technology, participants defy of technological changes, difficulty in accessing the internet, difficulty in analyzing teachers' perspectives and delivering system. (Isman & Altinay, 2005).

Similarly, nervousness can cause psychological problems for students and teachers while they are getting engaged in distance education. Students and teachers may have technical barriers while communicating due to lack of technological expertise and may have semantic barriers during communication, (Perreault, Waldman, Alexander & Zhao, 2002). Moreover, mostly teacher and student are unaware of their roles which also becomes a barrier in teaching – learning process.

Literature review

Most of the time in distance education, teacher and students are far apart. This geographical distance creates barriers. Because of these barriers students can feel depressed, isolated and uncomfortable (Dennen, 2005). These barriers affect the learners' satisfaction, learners' quality of learning and learners' performance (Berge & Muilenberg, 2005). However, learning in distance mode can be effective if planned keeping in view these barriers. Berge (2013) thinks that with the advancement of technology, it would be possible to handle the problems of distance education.

On the basis of available literature, all these barriers of distance education can be grouped into following types:

1. Physical, Technical and Temporal Barriers: Correspondence courses offered in distance education face the problems of communication between learners and teachers. This is due to physical barriers. Technical barriers mean differences in access to technological capabilities all over the world. It affects individual aptitude towards the use of technology.

Temporal Barriers are related to time barriers. Students do not receive their course materials, assignments and letters on time because of poor postal system. Students face fear of time. Time pressure affects the learning skills of students in distance education. Thus, time constraints, and time pressures creates hurdles in teaching learning process. Therefore, distance learners need more motivation and self-direction as compared to face-to-face learners (Stine, 2004).

Eventually, use of telephone services has reduced some of the problems of two-way communication which occur in correspondence courses. Overall, problems regarding low levels of interaction resulted in a lack of motivation and a lack of eagerness to learn, often leading students to leave the course or program of distance education. Moreover, there are two major barriers on the way of students' success; one is course delivery and lack of interaction with teachers and other students and second one is lack of time (Altinay & Altinay 2003).

2. Psychological and Contextual Barriers: Psychological barriers are referred to perceptions (subjective feelings) of another person's presence or closeness while communicating with that person. Contextual barriers refer to difference in learning or problem solving between the abstract situations versus in an authentic situation presented to the student.

Often, students reported feeling confused, nervous or disturbed because of late feedback as they wanted quicker teacher feedback on content, assignments and online class schedule. Far too often these feelings were met by teacher who did not understand the intensity of students' sense of frustration or did not solve the problem satisfactorily (Hara & Kling, 2000; Thorpe, 2002). Result of these is that students face barriers in their learning. In other way contextual issues increase the students' real problem-solving abilities which will continue to be a critical goal in learning. Context-aware learning environment is mobile learning system that utilizes contextual tools which is called global positioning system (GPS) (Brown and Metcalf, 2008) and also called Quick Response (QR) codes (Ramsden and Jordan, 2009).

3. Social, Cultural, Interaction and Collaboration Barriers:

Technology has increased social interaction. In distance education, learners can create social group / community and work together on digital discussion forum. Teachers may join these groups and make the learning more interactive. (Koh & Hill, 2009). Therefore, Siemens and Downes (2005) focus on the role of social and cultural form of communication in teaching and learning process. As learning is through the contact of network nodes which connection globally. In this way learners communicate and share ideas with others by using the new digital technologies. But absence of these digital technologies creates barriers in their communication and teaching-learning process.

Cultural differences among distance learners also create communication barriers. Colombo, (2004) states that sometimes teachers, while interacting with students from a different language and culture, represent their own cultural perspectives. Such kind of miscommunication creates barriers in teaching learning process. To cope with this kind of miscommunication, teachers need some cultural context information to help them to understand the cultural differences of their students (Lai & Ishiyama, 2004). Hence, this awareness will help the teachers to deal the barriers created by these cultural differences adequately (Karadeniz, 2015; Kasahara & Turnbull, 2005).

With the increase of technologies for distance education, the feelings of loneliness and physical distance of the learners have been reduced. Around the same time, however, students from various localities and cultures have been increased, which make communication and language differences more of a challenge (Bash, 2009; Betts, 2009; Hallberg & Wafula, 2010).

For effective teaching -learning process, emotional connection between teacher and learner is required. Moreover, immediate feedback to the learner by the teacher enhances his/her motivation which results effective learning. But absence of emotional link and feedback results in interaction barrier (Kim, Liu & Bonk, 2005). For most participants as indicated by So and Brush (2008) it is more difficult in most of the cases to establish the same sense of social presence and to overlook communication problems related to online social interactions compared to the same participants in-person. Usually in online classroom technologically mediated delivery mechanisms are not allowed the same number of social-context cues (de Bruyn, 2004).

In general collaboration, communication and discussion becomes difficult when teacher and learner have different cultural backgrounds (Shen, 2004). Because they define content based upon their ideas, faith,

religion, language and local customs (Ali, 2006, Sarrafzadeh & Williamson, 2012). Thus, communication barriers have to be kept in view while designing distance education programs. Allama Iqbal Open University is an open distance learning university in Pakistan, therefore, this study has been designed to explore the communication barriers in distance education and their effect on achievement of distance learners.

Objectives of the Study

The objectives of the study were:

1. To explore social, cultural, temporal, technical, psychological, contextual, and collaborating barriers in distance education.
2. To find out the effects of communication barriers on achievement of distance learners.

Research Questions

This study was conducted to find the answers of following questions:

1. What are the social barriers in distance education?
2. What are the cultural barriers in distance education?
3. What are the temporal barriers in distance education?
4. What are the technical barriers in distance education?
5. What are the psychological barriers in distance education?
6. What are the contextual barriers in distance education?
7. What are the collaboration barriers in distance education?
8. How do communication barriers affect the distance learner achievement?

Methodology

Population

The population of study comprised of:

1. Tutors of M.Ed of Provincial Headquarters and Islamabad i.e. 1104.
1. Students of M.Ed of Provincial Headquarters and Islamabad i.e.33120.
2. Regional Directors of AIOU stationed at Provincial Headquarters and Islamabad i.e. 12.
3. Academia of Faculty of Education i.e. 20.

Table 1
Population of the Study

Regions	Tutors	Students	Academicians	Regional Directors
Islamabad	231	6930	20	2
Lahore	229	6870	-	3
Karachi	252	7560	-	3
Quetta	202	6060	-	2
Peshawar	190	5700	-	2
Total	1104	33120	20	12

Sampling of the Study

After taking each Regional Directorate as strata, multistage sampling was used in this research.

Table 2
Sample of the Study

Regions	Tutors	Students	Academicians	Regional Directors
Islamabad	70	80	20	2
Lahore	70	80	-	3
Karachi	60	75	-	3
Quetta	50	75	-	2
Peshawar	50	70	-	2
Total	300	380	20	12

Research Instruments

Four questionnaires were developed in the perspective of Social, Cultural, Temporal, Technical, Psychological, Contextual and Collaboration barriers i.e. Questionnaire for Students ($\alpha = 0.94$), Questionnaire for Tutors ($\alpha = 0.9$), Questionnaire for Academicians ($\alpha = 0.9$) and Questionnaire for Regional Directors ($\alpha = 0.98$). The validity of tools was tested by experts. All Questionnaires were developed on five-point Likert scale i.e. Strongly Agree (SA), Agree (A), Uncertain (UNC), Disagree (DA) and Strongly Disagree (SDA).

Data Collection

The questionnaires were administered by e-mail as well as by post to the students, Tutors, Regional Directors as data of students, tutors and regional directors were taken from admission department of AIOU.

While for the academicians, questionnaire was served personally and collected in the same way. Data collected through questionnaires were analyzed by using SPSS. The Mean and Standard Deviation were used for organizing and summarizing data.

Results

Table 3

Social Barriers in the learning process of Distance Learners

Respondants	Academicians	Regional Directors	Tutors	Students
Mean Score	3.68	4.08	3.69	3.7
S. D	0.495	0.415	.422	0.362

Table 3 shows mean score of academicians ($\bar{x} = 3.68$), Regional Directors ($\bar{x} = 4.08$), tutors ($\bar{x} = 3.69$) and students ($\bar{x} = 3.7$). As all mean scores are greater than 3.0, therefore, it is evident that respondents are of the view that there are social barriers in learning process of distance learners .

Table 4

Cultural Barriers in the learning process of Distance Learners

Respondants	Academicians	Regional Directors	Tutors	Students
Mean	3.46	3.94	3.36	3.26
S. D	0.348	.430	0.286	0.209

Table 4 shows mean score of academicians ($\bar{x} = 3.46$), Regional Directors ($\bar{x} = 3.94$), tutors ($\bar{x} = 3.36$) and students ($\bar{x} = 3.26$). As all mean scores are greater than 3.0, therefore, it is evident that respondents are of the view that there are cultural barriers in learning process of distance learners .

Table 5

Temporal Barriers in the learning process of Distance Learners

Respondants	Academicians	Regional Directors	Tutors	Students
Mean	3.81	4.12	3.8	3.67
S. D	0.170	.169	0.235	0.196

Table 5 shows mean score of academicians ($\bar{x} = 3.81$), Regional Directors ($\bar{x} = 4.12$), tutors ($\bar{x} = 3.8$) and students ($\bar{x} = 3.67$). As all mean scores are greater than 3.0, therefore, it is evident that respondents are of the view that there are Temporal Barriers in learning process of distance learners.

Table 6

Technical Barriers in the learning process of Distance Learners

Respondants	Academicians	Regional Directors	Tutors	Students
Mean	3.88	4.08	3.80	3.71
S. D	0.148	.365	0.284	0.122

Table 6 shows mean score of academicians ($\bar{x} = 3.88$), Regional Directors ($\bar{x} = 4.08$), tutors ($\bar{x} = 3.80$) and students ($\bar{x} = 3.71$). As all mean scores are greater than 3.0, therefore, it is evident that respondents are of the view that there are Technical Barriers in learning process of distance learners.

Table 7

Psychological Barriers in the learning process of Distance Learners

Respondants	Academicians	Regional Directors	Tutors	Students
Mean	3.51	4	3.82	3.88
S. D	0.271	.210	0.099	.230

Table 7 shows mean score of academicians ($\bar{x} = 3.51$), Regional Directors ($\bar{x} = 4.00$), tutors ($\bar{x} = 3.82$) and students ($\bar{x} = 3.88$). As all mean scores are greater than 3.0, therefore, it is evident that respondents are of the view that there are Psychological Barriers in learning process of distance learners.

Table 8

Contextual Barriers in the learning process of Distance Learners

Respondants	Academicians	Regional Directors	Tutors	Students
Mean	3.7	4.04	3.88	3.70
S. D	0.1	0.125	0.16	0.114

Table 8 shows mean score of academicians ($\bar{x} = 3.7$), Regional Directors ($\bar{x} = 4.04$), tutors ($\bar{x} = 3.88$) and students ($\bar{x} = 3.70$). As all mean scores are greater than 3.0, therefore, it is evident that respondents are of the view that there are contextual barriers in learning process of distance learners.

Table 9

Collaborative Barriers in the learning process of Distance Learners

Respondants	Academicians	Regional Directors	Tutors	Students
Mean	3.65	3.98	3.70	3.74
S. D	0.18	0.236	0.095	0.162

Table 9 shows mean score of academicians ($\bar{x} = 3.65$), Regional Directors ($\bar{x} = 3.98$), tutors ($\bar{x} = 3.70$) and students ($\bar{x} = 3.74$). As all mean scores are greater than 3.0, therefore, it is evident that respondents are of the view that there are Collaborative Barriers in learning process of distance learners.

Table 10
Effects of communication barriers on the learning process of Distance Learners

Respondants	Academicians	Regional Directors	Tutors	Students
Mean	3.56	4.15	3.97	3.84
S. D	0.278	0.208	0.217	0.154

Table 10 shows mean score of academicians ($\bar{x} = 3.56$), Regional Directors ($\bar{x} = 4.15$), tutors ($\bar{x} = 3.97$) and students ($\bar{x} = 3.84$). As all mean scores are greater than 3.0, therefore, it is evident that respondents are of the view that communication barriers affect learning process of distance learners .

Discussion

Data analysis revealed that distance learners face challenges in communication. These challenges are due to the social barriers ,the cultural barriers,the temporal barriers, the technical barriers,the psychological barriers,the contextual barriers and the collaboration barriers in distance education. Moreover ,communication barriers affect learning process of distance learners. These results are in line with the following previous researchs:

Henke and Rusum (2000) in their study recommended that physical separation can create a sense of isolation in many students that's why they identified electronic mail, websites forums, chat rooms and internet conferencing to decrease the isolation feeling. While this study also recommends that interaction through tutorial and social media as this can reduce isolation of the students. Shen (2004) in his study pointed out that for most people communication is difficult with strangers and tutors and this study also supports this findings.

Zacharia (2008) in his study found that poor coordination and communication between administrators and students are one of the causes of drop out in distance education while study also supports Zacharia work by recommending that immediate and timely feedback from tutors to the students can reduce the drop out. Pajo (2001) in his study pointed out that incompetency to use the web-based are associated with the technology which may hinders the student from transferring his/her intentions into behavior while this study recommends that accessibility of internet and skills with new technological devices as well as social media networking enhance the teaching learning process. O'Hanlon (2001) recommends in his study that lack of technical support create barriers in distance learning while the technical support is also recommended by this study.

Belchair and Cucek (2001) in their study pointed out that lack of communication with other students and the instructor is the first biggest obstacle and lack of time is second biggest obstacle of distance education while this study supplements Belchair and Cucek by suggesting immediate and timely interaction between students and tutors. Kamal and Sultana (2000) in their study pointed out that limited use of media obstructs the effective communication in distance learning, while this study also highlight the importance of media in distance education.

Sali (2008) in his study pointed out that lack of social interaction is a barrier which de-motivates the students learning in distance education. While this study carried out by researcher also supports the value of social interaction. Koh and Hill (2009) in his study pointed out that lack of online group work obstructs the effective communication in distance learning while this study supports the importance of online group work for learner's success.

Pillai (2011) in his study pointed out that language barriers and lack of subject knowledge hinders the effective communication in distance learning while this study also highlight the importance of language and subject knowledge.

Basedon the findings and conclusions, following recommendations are being made:

1. It is recommended to provide better communication facilitates to the distance learner through digital support by student support services.
2. It is recommended to provide timely feedback to the distance learners which enhance the teaching learning process.
3. It is also recommended to facilitate monitoring process of postal services by Pakistan post office.
4. Accessibility of internet and skills to use new technological devices facilitates the distance learner by social media networking. Therefore ,provision of internet facility and training to use technological devices may be arranged to overcome these barriers.
5. Provision of more group interaction through tutorialmay enhance the distance learner performance.

References

- Ali, A. (2006). *Modern technology and mass education: A case study of a global virtual learning system*. In A. Edmundson (Ed.), *Globalized learning cultural challenges*. Hershey, PA, USA: Idea Group. pp 327-339.
- Altinay, F., & Altinay, Z. (2003). Communication barriers in distance education. *The Turkish Online Journal of Educational Technology*, 2 (4), 374-388.
- Bash, L. (2009). Engaging with cross-cultural communication barriers in globalized higher education: The case of research-degree students. *Intercultural Education*, 20(5), 475-483.
- Belcheir, M. J. & Cucek, M. (2001). *Student Perceptions of Their Distance Education Courses Research Report 2001-04*. Retrieved from <http://files.eric.ed.gov/fulltext/ED480923.pdf>.
- Berge, Z. L., & Muilenberg, L. Y., (2005). Student Barriers to Online Learning: A factor analytic study, *Distance Education*, 26, 29-48.
- Berge, Z. L., (2013). Barriers to Communication in Distance Education. *Turkish Online Journal of Distance Education-TOJDE* January 2013 ISSN 1302-6488 Volume: 14(1), 374-388. Retrieved from <https://tojde.anadolu.edu.tr/yonetim/icerik/makaleler/866-published.pdf>.
- Betts, K. (2009). Online human touch (OHT) training & support: A conceptual framework to increase faculty engagement, connectivity, and retention in online education. *MERLOT Journal of Online Learning and Teaching*, 5(1), 29-48.
- Brown, J., & Metcalf, D. (2008). Mobile learning update. *Elliott Masie's Learning Consortium Perspective*. Retrieved from <http://www.numerons.in/files/documents/M-Learning-Forecast.pdf>
- Colombo, M. W. (2004). Family literacy nights and other home-school connections. *Educational Leadership*, 61(8), 48-51.

- de Bruyn, L. (2004). Monitoring online communication: Can the development of convergence and social presence indicate an interactive learning environment? *Distance Education*, 25(1), 67-81. DOI: 10.1080/0158791042000212468
- Dennen, V. P., (2005). From Message Posting to Learning Dialogues: Factors Affecting Learner Participation in Asynchronous Discussion, *Distance Education*, 26, pp.127-148.
- Hallberg, D., & Wafula, L. (2010). Empowering rural women in Kenya with literacy skills using web 2.0: experiences of language & communication barriers in learning, *Proceedings of the 3rd International Conference on ICT for Africa*, March 25-27 Yaounde, Cameroon (pp 100-110). Baton Rouge, LA: International Center for IT and Development.
- Hara, N., & Kling, R. (2000). Students' Distress with a Web-Based Distance Education Course: *An Ethnographic Study of Participants' Experiences*. *Information, Communication and Society*, 3(4), 557-579.
- Henke, H. & J. Russum (2000). Factors influencing attrition rates in a corporate distance education program. *Education at a Distance Journal*, 14 (44), 2-26.
- Isman, A., Canan, O., Isbulan, O. & Demir, Z. (2008). Communication Barriers: A Study of Teacher Candidates of Using Technology. *International Educational Technology Conference 2008*(201 – 208). Eskisehir.
- Kamal, M. Z. & Sultana, S. A. (2000). *Barriers to Development in Open Learning and Distance Education*. Bangladesh: Bangladesh University Press.
- Karadeniz, A. (2015). Flipped classrooms. *Journal of Research in Education and Teaching*, 4(3), 322-326.
- Kasahara, M., & Turnbull, A. P. (2005). Meaning of family-professional partnerships: Japanese mother's perspectives. *Exceptional Children*, 71(3), 249-265.

- Kim, K. J., Liu, S., & Bonk, C. J. (2005). Online MBA students' perceptions of online learning: Benefits, challenges and suggestions. *The Internet and Higher Education*, 8 (4), 335-344.
- Koh, M. H., & Hill, J. R. (2009). Student perceptions of group work in an online course: Benefits and challenges. *Journal of Distance Education*, 23(2), 69-91.
- Koh, M. H., Barbour, M., & Hill, J. R. (2010). Strategies for instructors on how to improve online group work. *Journal of Educational Computing Research*, 43(2): 183-205.
- Lai, Y., & Ishiyama, F. I. (2004). Involvement of immigrant Chinese Canadian mothers of children with disabilities. *Exceptional Children*, 71(1), 97-108.
- Moore, M. G., & Kearsley, G. (2012). *Distance education: A systems view of online learning*, (3rd ed.). New York: Wadsworth/Cengage.
- Mumsch, T., & Wilson, B. (2003). The role of online, asynchronous interaction in development of light and color concepts. *The Journal of Interactive Online Learning*, 2(2),1-17. Retrieved from <http://www.ncolr.org/jiol/issues/PDF/2.2.5.pdf>
- O'Hanlon, N. (2001). Development, delivery, and outcomes of a distance course for new college students. *Library Trends*, 50(1), 8-27.
- Pajo, K., & Wallace, C. (2001). Barriers to the Uptake of Web-Based Technology by University Teachers. *Journal of Distance Education*, 16(1),70-84. Retrieved from <http://www.jofde.ca/index.php/jde/article/view/171/127>
- Pereira, A. Lisbon, A., & Löhmus, K. (2005). Pedagogical issues in ODL. In K. DePryck (Ed.), *Getting started with open and distance learning*. (pp: 43-55). Antwerp, Belgium: Garant Publishers. Retrieved from <http://www.odlexpert.net/getstart/chapter4.pdf>
- Perreault, H., Waldman, L., Alexander, M., & Zhao, J. (2002). Overcoming Barriers to Successful Delivery of Distance Courses. *Journal of Education for Business*,77(6),313-318. Retrieved from <http://www.tojet.net/articles/v2i4/242.pdf>

- Pillai M. (2011). *Barriers to Effective Communication*. Retrieved from <http://www.buzzle.com/articles/barriers-to-effective-communication.html>.
- Ramsden, A., & Jordan, L. (2009). *Are students ready for QR codes? Findings from a student survey at the University of Bath*(Working Paper). Retrieved from University of Bath website http://opus.bath.ac.uk/12782/1/qrcodes_student_survey_uniofbath_feb09.pdf
- Sali J. B. (2008). Designing Motivational Learning Systems in Distance Education. *Turkish Online Journal of Distance Education*, 9(3),149-161. Retrieved from http://uvt.ulakbim.gov.tr/uvt/index.php?cwid=9&vtadi=TPRJ%2CTAR%2CTTIP%2CTMUH%2CTSOS&ano=98084_e36f51beb47d57846f6f85cde3addf4b
- Sarrafzadeh, M., & Williamson, K. (2012). Multicultural, virtual work places: Opportunities and challenges for LIS educators. *International Journal of Information Science and Management*, 2(1), 89-102. Retrieved from http://www.ricest.ac.ir/ijist/Vol10N1/ijism-V10N1_files/ijism101-89-102.pdf
- Shen, C-Y. (2004). The impact of cultural factors in distance learning: A reviewing research. In L. Cantoni & C. McLoughlin (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2004* (pp. 3743-3748). Chesapeake, VA: AACE.
- Siemens, G., & Downes, S., (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning* 2(1), 3-10.
- So, H.-J., & Brush, T. A. (2008). Student perceptions of collaborative learning, social presence and satisfaction in a blended learning environment: Relationships and critical factors. *Computers and Education*, 51, 318–336.
- Stine, L., (2004). “The Best of Both Worlds: Teaching Basic Writers in Class and Online”, *Journal of Basic Writing*, 23, 49-69.

Thorpe, M. (2002). Rethinking Learner Support: The Challenge of Collaborative Online Learning. *Open Learning*, 17(2), 106-119.

Zacharia, R. R. (2008). *Factors Causing Students Drop out from Education Programme at the Open University of Tanzania. The Case of Tanga Regional Centre*(Education Thesis). The Open University of Tanzania, Tanzania.

Citation of this Article:

Anjum, S., Bhatti, R. & Iqbal, M.J. (2020). A Study of Communication Barriers in Open Distance Learning System of Education. *Pakistan Journal of Distance and Online Learning*, 6(1). 247-261.