

### Journal of Development and Social Sciences www.jdss.org.pk



#### **RESEARCH PAPER**

### Blended Learning a Boon or a Bane: Students Perspectives

## <sup>1</sup>Dr. Najam ul Kashif, <sup>2</sup>Dr. Muhammad Arshad Javed and <sup>3</sup>Dr. Muhammad Arslan Raheem

- 1. Assistant Professor, Department of Education, The Islamia University of Bahawalpur, Punjab, Pakistan
- 2. Associate Professor, department of Education, University of Education Lahore, Dera Ghazi Khan Campus, Punjab, Pakistan
- 3. Assistant Professor, department of Education, University of Education Lahore, Dera Ghazi Khan Campus, Punjab, Pakistan

**Corresponding Author:** arshad.javaid@ue.edu.pk

#### ABSTRACT

The current study examines the blended learning experiences of the university students from the South Punjab, Pakistan. It also justifies whether these practices are useful in "Education in Emergency" and the other impending threats like COVID19 and monkey pox. The students are both a crucial component and a major stakeholder in education. The study was delimited to only two Universities situated in southern Punjab. Four hundred students (221 male and 179 female) from these public sector universities were taken as a sample. The Islamia University of Bahawalpur and Bahauddin Zakariya University Multan were included in this study. A self-developed Questionnaire on five point rating scale comprising 40 statements was used as a tool for data collection from the defined sample. The findings of the study reveal that blended learning is a fruitful if delivered carefully and technically. Some of the students preferred to learn on campus than online due to lack of facilities, expertise and internet disruption. The study recommends a proper training for the teachers and the taught as well as the availability of the required equipment during such type of teaching learning.

# **KEYWORDS** Blended Learning, Monkey pox, COVID-19, University, Southern Punjab **Introduction**

The method blends the best aspects of traditional classroom instruction—namely, face-to-face instruction—with online learning in terms of information transfer and interaction techniques. Face-to-face instruction involves students and teachers meeting in person at a set time of day, in the same location. This method uses synchronous sessions and does not require the use of communications technologies (Manwaring et al., 2017). There are numerous effects that the new coronavirus COVID-19 pandemic has had on our communities. The closing of schools, from pre-schools to universities, is one of these effects. In response, a large number of educational institutions swiftly moved in-person, campus-based classes online (Yaseen, Jathol, & Muzaffar, 2020; Koksal, 2020).

Ahmad and Al-Khanjari (2011), Modern Education One of the most crucial elements in accomplishing the twin goals is conserving history while also fostering acceptance. Every nation, town, and culture works to improve its educational institutions, which are based on reliable knowledge, abilities, and information. Technology use in the classroom benefits students by creating a more engaging, motivating, and appropriate learning environment for them. Technology therefore has the potential to be extremely important in the teaching and learning process.

We are optimistic that we will personally experience the shift to online learning within the next ten years. As per Chang and Fisher's (2013) report, online learning This is computer-generated instruction via CD-ROM and the internet, including the features listed below: learning-related materials that assist students in presenting subjects through the use

of learning approaches like experiences and examples, tactics for gaining new information and abilities pertinent to personal learning objectives, or ways to increase organizational efficacy through the use of media elements like words and images There are other similar ideas in online learning. Some people think that online learning is just limited to activities that happen inside of a web browser and don't require any further software or learning aids. Such a bleak image leaves out a lot of inventive uses of similar technologies for teaching. With the advent of high-speed communication technology, it is critical to embrace the concept of inclusive online learning, which encompasses a wide range of tools (Brown, & Liedholm, 2002).

Duart, Sancho-Vinuesa, & Castano-Mounoz, (2014), there are some guidelines in the literature to accurately measure the profitability and cost-effectiveness of online learning operations. It is irrational to expect that investing in technology will automatically improve economic output. Technology integration into industrial processes takes time as an alternative. To take advantage of the evolving technologically skilled workforce in economic processes, the educational foundation must be altered immediately (Muzaffar & Javaid, 2018). This increased education, on the other hand, will motivate them to finish their schooling and pursue extra education, resulting in better-paying jobs and more devoted citizens of the twenty-first century who are hooked to excellent government and trying to improve the economy. During this stage, an active assessment program is required to determine the success of life skill.

Combining two distinct approaches—especially e Learning or an in-person, face-to-face approach in the classroom—is the notion behind combined learning. To provide additional insight into the use of both online and in-person learning in various circumstances, these concepts are examined in the analysis that follows. Distance education made possible by electronic media, such as the internet, DVDs, videotapes, CD-ROMs, televisions, and mobile phones, is referred to as both physical and online learning. Cracraft (2015) went on to say that both online and physical learning provide users with information via the internet, which is more sophisticated than in-person methods in terms of updating, storing, and disseminating educational materials.

Two key components of both online and physical learning are the use of the internet for updating, retrieving, posting, and displaying. Additionally, Anderson and Henderson (2004) assert that both online and in-person learning offer several advantages, including lower travel costs, increased convenience, and student control over learning speed. Additionally, the enormous advantages extend to educational institutions, which are expected to increase the general flexibility of their curricula. On the other hand, face-to-face instruction is defined as a setting in which students primarily learn from their instructor or professor as well as additional materials including books, catalogs, notebooks, audio recordings, and video tapes, among others. It is regarded as lecture-centered, structured learning in which students receive instruction from professors, teachers, and educators.

According to Kintu et al. (2017), learning effectiveness in both online and physical learning is influenced by how well learners evaluate the quality, dependability, and simplicity of online teaching platforms. System functioning seriously impairs learner performance in the technique and may result in the failure of such learning initiatives (Shrain, 2012). Therefore, it is crucial to consider the quality of technology in order to ensure learning performance success in both online and physical learning.

Tselios et al. (2011) investigated learner perceptions after using a learning-management system and found that the usefulness of the system is established among users through online use. Like Klien, Noe, and Wang (2006), Anderson and Henderson (2004) discovered that a system incorporating feedback mechanisms can be beneficial for both online and physical learning, particularly when bandwidth is limited. As a function of the possible effectiveness and success of both in-person and online learning approaches and

methodologies, the authors of this study examined the use of an education management system called Moodle and its specific tools. Higher education students' levels and degree of learning management system material can be regarded as a reliable indicator of exceptional performance in blended, in-person, and online learning environment and it can lead to learner satisfaction.

According to recent studies, learning is enhanced in mixed, in-person, and online learning contexts when learning management systems and their own tools are used effectively. An antecedent factor for integrated learning success is learners' satisfaction with a learning-management system. According to Goyal and Tambe (2015), students who demonstrated an awareness of the online learning platform had an improvement in their learning. Students expressed satisfaction with the online learning management system and thought that it enhanced and increased their understanding of the course materials. Descriptive data to show that there is access to additional information for learning through the use of Moodle's uploaded syllabus and program ideas (Muzaffar, et. al., 2020).

In today's online world, the traditional classroom concept has changed from table, chair, desk, black or white boards, to cyberspace. Black and white boards are replaced by interactive boards, smart white boards are taking the place of chalks and dusters, as well as online discussion forums are replacement of classroom where live sessions even at odd timings and prompt feedback from the teachers is available. Teaching learning process and experiences of teachers and students in the current age of competition and global citizenship, preferences are in the side of blended-teaching learning process instead of face-to-face classrooms.

As opined by Rivera and Meler (2012), the primary preferences of higher education institutions include head-on communication improved through e-sessions. Some studies have argued that merely examining course grades is insufficient to estimate or calculate the effectiveness of a course because other factors, such as learner satisfaction, may influence academic achievement. This is true even though the majority of distance education research has examined the effectiveness of distance programs through examination of course grades, marks, and test core results. According to the study's definition, satisfaction is the joy or happiness that an individual or community experiences when particular objectives are accomplished. Student satisfaction plays a significant role in the successful completion and end of the course, even though there is no association between it and academic achievement (Chang & Fisher, 2013).

The amount of social engagement you hope to experience while pursuing your degree is a last thing to think about. Even if it happens less frequently in online courses, social interaction with teachers and other students nevertheless happens frequently. The format is the biggest shift, with a lot of online student interactions occurring through online discussion boards or video chats. Additionally, some courses could include pre-recorded recordings of the same lectures that are given to students on campus. These video lectures can assist you in better understanding the assigned readings if you're a social learner who enjoys asking questions and picking your teachers' brains (Muzaffar, 2016). Those that thrive on in-person engagement are likely to find that physical communication is still the best choice, even with the developments in technology. Some people find that regularly meeting and interacting with their professors can be inspiring. Knowing that your teacher is approachable and interested in your education makes it a little easier to go above and beyond. Speaking with students face-to-face in a classroom may also offer additional chances for impromptu questions or fascinating digressions that could help a subject "click" in their minds (Sahin & Shelley, 2008).

This study is intended to study the blended teaching learning experiences of students during different pandemic situations which have happened in the last five years in the South Punjab. Such pandemics are international like COVID-19 and MONKEYPOX, and national like SMOG etc. The selection of respondents is an important issue in any research and especially in survey research. Forty 40 students (20 boys and 20 girls) from each department, from each university were randomly selected. Two hundred students from BZU and two hundred from IUB were selected as a sample of the study.

Table 1
Detail of sample in this study

Sr. No.	Departn	nent	Male	Female	Total
1	Educat	ion	20	20	40
2	Applied Psy	chology	20	20	40
3	Computer :	Science	20	20	40
4	Englis	sh	20	20	40
5	Managemen	t Science	20	20	40
Total	5 Departments	BZU Multan	100	100	200
Total	5 Departments	IUB	100	100	200
Defined Sampl	e		•		400

After a comprehensive literature review, a questionnaire was developed which was based on 5-point Likert scale. The questionnaire consists of 40 items. Cronbach's Alpha was used to calculate the validity of the survey questionnaire. 30 questionnaires were distributed among students for the sake of pilot testing. Cronbach Alpha was calculated for each factor in the questionnaire. Reliability details are given in Table 1.2 below:

Table Error! No text of specified style in document.1

Reliability of questionnaire

Kenability of questionnaire			
S.No.	Variable	Cronbach Alpha	
1	Knowledge	.89	
2	Skill	.88	
3	Tools	.90	
4	Obstacle/Challenges Using ICT	.79	
	Total Item	.89	

#### **Results and Discussion**

Collected data was analyzed and presented in tabular form with interpretation. Following section highlight the findings of the study and discussion on the findings as well.

Table 3
Students Use of Accessories

Sr.	Statement	Y	Yes		No	
No.	Statement	f	%	f	%	
1	Internet Browsing	368	94.6	21	5.4	
2	Computer Proficiency	361	92.8	28	7.2	
3	Experience of Students in Mobile Use	370	95.1	19	4.9	

Table 3 presents the students' experience in internet browsing. More than ninety four percent (94.6%) of students were response are yes and 5.4% students responses are no. Data revealed that 92.8% of students' response about yes and 7.2% are no response about the computer proficiency. Data depicts that 95.1% students' response in yes and 4.9% are no experience of students in mobile use.

Table 1.4
ICT Resources Usages by Students

Ter Resources usages by Students						
Sr. No.	Statement		Always	Often	Seldom	Never
1	Online Assignment Material -	_ <i>f</i>	327	9	27	26
		%	84.1	2.3	6.9	6.7
2	Personal Computer/Laptop	_ f	337	8	34	10
		%	86.6	2.1	8.7	2.6

3	E-Book and Internet Facility	f	313	32	18	26
<u> </u>	E-BOOK and internet Facility	%	80.5	8.2	4.6	6.7
4	E-Research Journal	f	305	32	28	24
		%	78.4	8.2	7.2	6.2
5	E-Experts in my field of study	f	266	47	36	40
	E-Experts in my neid of study	%	68.4	12.1	9.3	10.3
6	Chatting with my fellows	f	321	40	10	18
0	Chatting with my lenows	%	82.5	10.3	2.6	4.6
7	E-Notes	f	315	49	25	0
/	E-Notes	%	81.0	12.6	6.4	0.0
8	E-Tutors	f	294	42	23	30
0		%	75.6	10.8	5.9	7.7
9	Exchange my notes with fellows	f	319	49	13	8
9	Exchange my notes with lenows	%	82.0	12.6	3.3	2.1
10	Count my laigure time	f	250	15	107	17
10	Spend my leisure time	%	64.3	3.9	27.5	4.4
11	Dolov mysolf	f	301	41	47	0
11	Relax myself	%	77.4	10.5	12.1	0.0
12	Dlay games	f	294	45	42	8
12	Play games	%	75.6	11.6	10.8	2.1
13	E-mailing to develop communication with tutors	f	196	81	79	33
13	and E-learners	%	50.4	20.8	20.3	8.5

Table 4 Students' opinions about the statement "ICT Resources used by Students". Data showed that 84.1% students always use of online assignment material, 86.6% of students use personal computer / laptop, 80.5% of students always e-book and internet facility, 78.4% students use e-research journal, 68.4% of students use e-experts in their field of study, 82.5% of students use chatting with their fellows, 81% students use e-notes, 75.6% students use e-tutors, 82% students use exchange their notes with fellows, 64.3% students spend their leisure time, 77.4% students use relax their self, 75.6% students play games and 50% students always about the e-mailing to develop communication with tutors and physical and online learning.

Table 5
Students' Learning Experiences to Use ICT Resources during COVID-19

S. No.	Item	Mean	S.D.
1	Online Learning Interest	3.29	1.29
2	Learning is easy in Physical Classes	3.90	0.95
3	Cost Effectiveness of Online Classes	3.52	1.28
4	Time Saving approach in Online Learning	3.75	1.16
5	Internet as major issue in Online Classes	3.40	1.34
6	Online education as future of Teaching Learning Process	3.96	1.09
7	Students were untrained for Online Education	4.12	0.95
8	Online Teaching Learning process is enjoyable	4.15	0.92
9	Online Teaching Learning Process saves from pandemic situations	4.11	0.96
10	Live sessions are better than recorded lectures	3.77	1.25
11	Online Teaching Learning Process saves financial resources	4.20	0.99
12	Blended Learning approach is the futuristic	3.74	1.28
13	Pandemic situation has changed the Teaching Learning Process	4.29	0.84
14	Backward areas students' learning suffered in pandemic situation	4.09	1.13
15	Online assessment system is convenient for students	4.13	1.08
16	Online assessment process is enjoyable	4.04	1.06
17	Online Teaching Learning Process is not the substitute of physical	3.77	1.34
18	Students' motivation is less in online classes	4.08	1.00
19	Learning Environment is feasible only in physical classes	3.72	1.27
20	Communication is easy in online classes	4.01	0.93
21	Online learning also teaches IT skills	3.96	1.03
22	Online Teaching Learning Process give new concepts to learning	3.62	1.21
23	Online learning mentally spoils the students	3.75	1.21
24	Online learning isolating the students	3.97	1.03
25	Energy resources are fundamental to online learning	3.81	1.24
26	Latest knowledge shares through online learning	4.06	0.99
27	Online learning is flexible	4.11	1.19
28	Time management is core in online learning	4.12	1.02
	4.4.4		

29	Blended learning is an easy source of sharing knowledge	3.79	1.15
30	Globally students are interacted through social media resources	4.10	0.98
31	LMS is the key to blended learning	4.29	0.87
32	LMS improves the blended learning approach	3.37	1.45
33	Online teaching learning process is easily manageable	4.02	1.18
34	Blended Teaching pedagogy is different from traditional Teaching	4.65	0.48
35	Blended learning enhances the performance level of students	3.57	1.23
36	Online learning programs based on employability skills.	3.99	1.20
37	Teachers are more in access through online	3.44	1.23
38	Online tutorial support is easily available for students.	3.67	0.96
39	Online education is more formal mode of education	4.16	0.52
40	Blended mode is comprehensive mode of teaching learning process	4.16	0.91

There is a big group of the respondents who opined that they are satisfied with the blended learning mode of education. The pandemic situation has changed the world and the online mode is the futuristic approach in the field of education. Universities being the institutions of the territory education are ready to accept the shifting of traditional approach of teaching to blended approach of teaching. Although the sudden closure of educational institutions has made the teaching learning process difficult, but the blended mode has tried to overcome the situation. As the pedagogy of traditional teaching approach is totally different from blended teaching approach and many teachers are not well trained with the blended approach-based pedagogy, yet teachers ready to learn and practice the blended mode pedagogy.

Table 6
Gender wise comparisons of students about use of Physical and online learning

	dender wise comparisons of students about use of r hysical and online learning				
	Gender	Mean	Std. Deviation		
_	Male	96.28	14.84		
	Female	98.07	13.57		
	Total	97.26	14.17		

Table 6 shows that female mean score (98.07) was significantly high than mean score of male (96.28). This explores female are more interested in physical and online learning.

Table 7
Age wise comparisons of students about use of physical and online learning

inge wise comparisons or s	Tige wise comparisons of students about use of physical and offine fear fing				
Age	Mean	Std. Deviation			
Less than 18 years	95.14	13.18			
19-25 years	108.01	14.19			
26-35 years	99.83	12.59			
Total	97.26	14.17			

Table **Error! No text of specified style in document.**7 shows age wise comparison about use of physical and online learning data exhibits that mean score of 19-25 years of age is higher than all (108.01) and less than 18 years is lower than all (95.14). This explores that 26-35 years students take more interest in using physical and online learning.

Table 8
Locality wise comparisons about physical and online learning

Locality wise comparison	Locarty wise comparisons about physical and omnie ical ming					
Residential Status	Mean	Std. Deviation				
Urban	97.47	14.18				
Rural	96.48	14.15				
Total	97.26	14.17				

Table 1.8 shows that urban mean score (97.47) was significantly higher than mean score of rural (96.48) this explores that urban students have better attitude to use physical and online learning.

#### **Discussion**

The use of the mixed-learning approach, which combines the benefits of physical teaching with online learning, has irritated the interest of teachers, instructors and researchers. The findings of the study are supported by the different previous studies which are conducted in different regions of the world and at different levels, which has been highlighted by several scholars. According to Duart et al, (2014) the case of mixed learning is beneficial to adult learners who have many responsibilities such as balancing their work and family roles with their studies. In addition, the benefits also extend to adult students living far away from the university and faced with work and family responsibilities that prohibits them from attending the lecture, they find comfort in blended education. The argument is further supported by Iqbal & Ahmad (2010) who explain that factors such as learners' occupation, available time, and family duties are recognized as an impediment to learners' academic performance.

The concept of mixed learning also known, as blended or hybrid is the better option compared to either online or physical face-to-face interaction. This kind of learning is considered efficient for both the students, lectures because it brings on board technology to aid student learning and solves the challenges of how to best engage busy students in a cost-effective and learner-centered way. As such, the approach makes student feel mixed learning is helpful to them and this improves the overall perception of mixed learning.

In terms of gender impact, this study discovered that both female and male students had relatively similar positive attitudes toward both physical and online learning. This is consistent with the findings of Hussein et al. (2011), who discovered no statistically significant differences in attitudes between male and female students in Saudi universities. Furthermore, the effects of other demographic characteristics such as students' location in Punjab, age, and year of study on their attitude toward physical and online learning were not statistically significant.

The current study's findings revealed that online learning provides new opportunities for organizing teaching and learning, which is directly related to the study's findings. Knowles conducted an investigation into students' attitudes and motivation toward physical and online learning (2007). Current study highlights that physical and online learning saved times and effort for both teachers and students. These findings are linked to findings that students find easier to learn online. This study showed that students' attitudes toward physical and online learning and their level of access to different technologies were statistically significant; not surprisingly, students with better access to the Internet developed a stronger positive attitude. Najam, Iqbal and Ali in 2020 concluded their study that the technology access level with respect to its reliability affecting the students' attention while using ICT gadgets to support their learning.

This study showed that students' ability in technology is an important indicator of attitudes towards physical and online learning, which supports the results of previous research reflected in the literature (Li& Lalani, 2020). However, there is a need to provide appropriate training at different levels for the widespread adoption of physical and online learning in higher education in Punjab, to develop experience in the use of physical and online learning, and to gather information and inform future developments. These are important tasks that require serious attention and great effort from the Punjab government to ensure the development of adequate awareness, positive attitude and improve motivation for physical and online learning.

#### Conclusion

The majority of students use technologies for studying materials, searching e-books in internet, search experts in the field, chat with friends and search notes. Internet as a main source of learning, promote modern knowledge, mobile learning is an easy source to search the desired topic, mobile connects the university students for their assignments, LMS

(learning management system) as a good source for learning, LMS (learning management system) improves the attitude of students towards physical and online learning, they felt physical and online learning as a time saving way of learning.

Students find online classes more effective than physical classes. Although online learning is costly, ICT gadgets are expensive, internet issues during online classes are the major issue yet students are ready to shift and accept the modern approach of teaching process. Online learning is considered as the future of face-to-face education. Online learning is the only possible solution in the pandemics, when there is no way to interact face to face and at that time studies of the students affected badly i.e., during COVID-19, SMOG etc. Students are feeling at ease in online classes during pandemic situations. Online learning is better for all financial issues. Online exams have provided a comfortable time frame and real time platform to the students. They enjoyed the exam process. Attendance of the courses is necessary for an effective education.

In comparison to it, online classes were less motivating than the classes place in a classroom. But students feel comfortable in communicating online learning. Students feel comfortable to write a text on a computer in an online learning environment. Students feel comfortable while asking questions if there are problems in understanding an online lecturer. Online learning promotes isolation among students. Online learning promotes latest knowledge among the students.

#### Recommendations

In the context of mentioned conclusion, following recommendations were made:

- Students face financial problems in maintaining the internet connection therefore, low-cost internet packages for students should be introduced by Government. Beside this, internet at institution level should also be provided with up to mark quality.
- It was found that too much use of internet spoil the eyesight and health of students. So, usage of the internet should be appropriate for students and should be properly checked and balanced by parents and teachers.
- The lack of ICT gadgets at home makes online-learning difficult for students, so students should be provided with low-cost computers or laptops.
- There is a problem in opting physical and online learning due to inappropriate training
  of learners in using computers. Therefore, proper training should be provided to
  students and teachers.

#### References

- Ahmad, N., & Al-Khanjari, Z. (2011). Effect of Moodle on learning: An Oman perception. *International Journal of Digital Information and Wireless Communications*, 1(4), 746-752.
- Anderson, N., & Henderson, M. (2004). e-PD: Blended models of sustaining teacher professional development in digital literacies. *Physical and online learning*, 1(3), 383-394.
- Barshay, J. (2011). "Physical and online learning" for the little ones. *Education Week*, *31*(9), 1-14.
- Brown, B. W., & Liedholm, C. E. (2002). Can web courses replace the classroom in principles of microeconomics? *American Economic Review*, *92*(2), 444-448.
- Chang, V., & Fisher, D. (2013). The validation and application of a new learning environment instrument for online learning in higher education. In *Technology-Rich Learning Environments:*A Future Perspective, 1-20. https://doi.org/10.1142/9789812564412\_0001
- Cracraft, L. (2015). Effect of blending learning on student's percent increase in assessment scores (Doctoral dissertation, Northwest Missouri State University). Retrieved from http://www.nwmissouri.edu/library/resear chpapers/ 2015/Cracraft,%20Lyndsey.pdf
- Davis, E., Demby, H., Jenner, L. W., Gregory, A., & Broussard, M. (2016). Adapting an evidence-based model to retain adolescent study participants in longitudinal research. *Evaluation and Program Planning*, *54*, 102-111. Retrieved from https://www.sciencedirect.com/science/article/pii/ S014971 891 5001111
- Duart, J. M., Sancho-Vinuesa, T., & Castano-Mounoz, J. (2014). The Internet in face-to face higher education: Can interactive learning improve academic achievement? *British Journal of Educational Technology*, *45*(1), 149-159. doi:10.1111/bjet.12007.
- Figlio, D., Rush, M., & Yin, L. (2013). Is it live or is it internet? Experimental estimates of the effects of online instruction on student learning. *Journal of Labor Economics*, *31*(4), 763-784. doi:10.1086/669930.
- Flick, U. (2018). *The SAGE handbook of qualitative data collection*. SAGE publications Ltd, London. doi.org/10.4135/9781446282243.
- Goyal, E., & Tambe, S. (2015). Effectiveness of Moodle-enabled physical and online learning in private Indian Business School teaching NICHE programs. *The Online Journal of New Horizons in Education*, 5(2), 14-22.
- Graham, C. R., Woodfield, W., & Harrison, J. B. (2013). A framework for institutional adoption and implementation of physical and online learning in higher education. *The Internet and Higher Education*, 14-184. doi: 10.1016/j.iheduc.2012.09.003.
- Hussein, A. (2015). The use of triangulation in social sciences research: Can qualitative and quantitative methods be combined? *Journal of Comparative Social Work*, 4(1).
- Iqbal, M. J., & Ahmad, M. (2010). Enhancing quality of education through Online Learning: the case study of Allama Iqbal Open University. *Turkish Online Journal of Distance Education*, 11(1), 84-97.

- Kashif, N.u., Iqbal, M.Z., & Ali,M. Q. (2020). E-Bullying: A Threat for University Students' Social Life. *Global Educational Studies Review, V*(III), 403-408.
- Kintu, M. J., Zhu, C., &Kagambe, E. (2017). Physical and online learning effectiveness: the relationship between student characteristics, design features and outcomes. *International Journal of Educational Technology in Higher Education*, 14(1), 7.
- Klein, H. J., Noe, R. A., & Wang, C. (2006). Motivation to learn and course outcomes: The impact of delivery mode, learning goal orientation, and perceived barriers and enablers. *Personnel Psychology*, *59*(3), 665-702.
- Koksal, I. (2020). The rise of online learning. Forbes.
- Li, C., & Lalani, F. (2020). *The COVID-19 pandemic has changed education forever. This is how.* Paper presented at the World economic forum.
- Manwaring, K. C., Larsen, R., Graham, C. R., Henrie, C. R., & Halverson, L. R. (2017). Investigating student engagement in physical and online learning settings using experience sampling and structural equation modeling. *The Internet and Higher Education*, *35*, 21-33.
- McIntyre, S. (2016). Conducting effective online discussions. COFA Online.
- Muzaffar, M. (2016). *Educational Institutions and Political Awareness in Pakistan: A Case of Punjab*, Unpublished Ph. D Dissertation, International Islamic University Islamabad, Pakistan
- Muzaffar, M., Hussain, B., Javaid, M. A., Khan, I. U., & Rahim, N. (2020). Political Awareness in Educational Policies of Pakistan: A Historical Review, *Journal of Political Studies*, *27*(1), 257-273
- Muzaffar, M. & Javaid, M. A. (2018). Curriculum and Political Socialization: a Case Study of Secondary Schools in Pakistan, *Journal of Political Science and International Relations*, 4(2), 21-31
- O'Byrne, W. I., &Pytash, K. E. (2015). Hybrid and physical and online learning. *Journal of Adolescent & Adult Literacy*, 59(2), 137-140.
- Rivera, A., & Meler, M. (2012). Exploring teaching and learning using an I-touch mobile device. *Active Learning in Higher Education*, *13*(3), 203-217.
- Sahin, I., & Shelley, M. (2008). Considering students' perceptions: The distance education student satisfaction model. *Journal of Educational Technology & Society*, 11(3).
- Shrain, K. (2012). Moving towards physical and online learning paradigm: Readiness of higher education instructors in Palestine. *International Journal on Physical and online learning*, 11(4), 441–463.
- Taylor, S. J., Bogdan, R., & DeVault, M. (2015). *Introduction to qualitative research methods: A guidebook and resource*. New Jersey, NY.
- Tselios, N. K., Daskalakis, S., & Papadopoulou, M. (2011). Assessing the acceptance of a physical and online learning university course. *Educational Technology & Society*, 14(2), 224-235.
- Yaseen, Z., Jathol, I. & Muzaffar, M. (2020). Covid-19 and its Impact on South Asia: A Case Study of Pakistan, *Global International Relations Review*, III(I), 20-26.