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AN EVALUATIVE STUDY OF BLENDED LEARNING AS AN INNOVATIVE CHALLENGE FOR PAKISTANI ACADEMIA: PERCEPTION OF UNDERGRADUATE STUDENTS

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ABSTRACT

Blended Learning is blend of online learning activities, pedagogical methods and instructional technologies with F2F teaching. Importance of active participation of individuals in learning process is obvious and active learning involves dynamic partnership of teacher and students to share responsibility of instruction. Blended learning enhances interaction, understanding and involvement of students and teachers in the learning process. This is now globally, recognized teaching pedagogy in all kinds of higher education institutions. Blended Learning is the need of hour for the 21st century. It is a unique approach to impart knowledge, understanding and skills in the students. The purpose of the study is to investigate perception of undergraduate students about blended learning. This is a quantitative research in which a survey conducted by using structured questionnaire. Objective of this research study is to investigate the perception of students about advantages and challenges of blended learning. The sample of the study is 50 undergraduate students, randomly selected from the target population of a public university of Pakistan. The data is collected online. From the findings, it was concluded that students perceived digital illiteracy, Internet connectivity, technical problems, frustration, social isolation, lack of technical support service and access to personal devices as limitations of Blended Learning. The students appreciated BL as it develops computer skills, communication skills and provides easy access to authentic resources, and timely feedback from instructors and enhances their confidence. It was recommended that by opening more computer laboratories with the provision of technical support services and regular training of students from the university can overcome the limitations of BL.

Key Words: Blended learning, undergraduate students, limitations, advantages, perception, technical support services

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Introduction

The biggest challenge of the 21st century in the field of teacher education is presence and usage of information and communication technology (ICT).[1] However benefits of the manipulation of ICT in the teaching-learning process are quite obvious as it has led the whole world to new horizons of teaching and learning[2]. Importance of active participation of individuals in learning process is valid [3]and is more emphasized in theories of how people learn[4]. Active learning[5] involves dynamic partnership of teacher and students to share responsibility of instruction[6]**.** Blended learning[7]enhances interaction, understanding and involvement of students[8] and teachers in the learning process.[9] This mode of education combines face to face and online learning activities[10]Blended learning is now globally, recognized teaching approach in all kinds of higher education institutions[11].According to Graham Spanier blended learning is the greatest trend in higher education today.

Statement of the Problem:

Blended Learning is the need of hour for the 21st century. It is a unique approach to impart knowledge, understanding and skills in the students. The purpose of the study was to evaluate student's perception of challenges and advantages of blended learning.

Objectives of the Study:

The study was intended to be carried out keeping in view the following objectives:

1. To investigate the perception of students about the challenges of Blended Learning.
2. To assess the perception of students about the advantages of Blended Learning.

Research Questions:

1. What is the perception of students about the challenges of Blended Learning?
2. What is the perception of students about the advantages of Blended Learning?

Significance of the Study:

This study will be useful for teachers, administrators, policymakers, curriculum designers, and pre-service teachers.

Delimitation of the Study:

This study was delimited to:

1. The female students of the University of Punjab (PU) Lahore, Pakistan.
2. Following variables of challenges of blended learning: Social challenges, Technical challenges, and academic challenges and following variables of advantages of blended learning: Interpersonal skills , conducive learning environment and digital literacy. (Social, Technical, and academic challenges blended learning and Interpersonal skills , conducive learning environment and digital literacy)

Definitions of Terminology used:

BL: Blended Learning

PU: the University of Punjab

Review of Previous Related Studies

Bonk conducted a research to investigate that what is the effect of blended learning on professional development of students in military courses.[12] The results showed that students enjoyed blended learning but on campus teaching was more fruitful. Chen and Jones conducted research which aimed to assess effectiveness of online courses and satisfaction level of students about traditional learning and blended learning. The results showed that learning occurred more in traditional setting of teaching but analytical skills of students developed in blended learning.[13]

Soomro conducted a research which aimed to explore the adaptation level of blended learning in university teachers in Pakistan. The findings indicated that university teachers have positive perception for using technology in their classrooms and most of the teachers have basic skills needed to run on line courses.[14]

Ravitch [15]conducted a study which aimed to identify the challenges that students and teachers' face with technological use in blended learning settings. The results showed that students face problem of insufficient availability of resources and complexity of the usage of technology. Similarly teachers encounter the technological proficiency and competency, negative beliefs on the use of technology, difficulty in operating systems.[16]
Tondeur conducted quasi-experimental study to investigate the achievement, attitudes and cooperativeness of pre-service science teacher's.[17] The results of the study depicted that attitude of students towards blended learning and achievement in blended learning was significantly higher than students in control group.[18] No significant difference was found in attitude of students towards cooperativeness in both groups.
Willemark conducted a study to investigate what is effect of blended problem-based learning on student's motivation.[19] They made a comparison between traditional problem-based learning and blended problem-based learning in a survey. The findings showed that significant differences were found in motivation and learning out comes between groups.[20] It was concluded that blended problem-based learning increased motivation of students.

Procedure and Methodology

Research Design:

This was a quantitative research which was conducted to investigate the perception of students about advantages and challenges of blended learning.

Population of the study:

Undergraduate students of the University of Punjab Lahore Pakistan

Sample of the study:

80 students from university were selected randomly.

Instrument for data collection:

Structured questionnaire consisted of 17 items, based upon 5 point Likert Scale was used.

Data Analysis

The data collected through Likert scale were tabulated and analyzed using descriptive statistical measure (percentage & means)

Findings

Table: 1 Mean score of students on interpersonal skills

N	Communication	Self-Confidence	Mean
80	46	43	45

This tables shows that the Mean score of students on interpersonal skills was 45.

Table: 2 Mean scores of students on a Conducive Learning Environment

N	access to authentic course materials	feedback from instructor	teaching and learning more effective	work according to my own pace	Mean
80	56	55	64	62	59

This tables shows that the mean score of students on Conducive Learning Environment was 59.

Table: 3 Mean scores of Students on Digital Literacy

N	knowledge of computers	Internet skills	Mean
80	73	74	73

This tables shows that the mean score of students on Digital Literacy was 73.

Table: 4 Mean scores of students on Social Challenges

N	Socially isolated	Frustration	Mean
80	54	25	40

This tables shows that the mean score of students on Social Challenges was 40.

Table: 5 Mean scores of students on Technical Challenges

N	Connectivity	Lack of technical support services)	No computer access)	Mean
80	60	38	28	42

This tables shows that the mean score of students on Technical Challenges was 42.

Table: 6 Mean scores of students on Academic Challenges

N	Following Instructions	Less Interactive	Threat of plagiarism	Grasping course material	Mean
80	23	60	54	59	50

This tables shows that the mean score of students on Academic Challenges was 50.

Advantages

Table: 7 Percentages of scores of students on interpersonal skills

N	Communication	Self-Confidence	Mean
80	58%	54%	56 %

This tables shows that the Percentages of scores of students on interpersonal skills is 56%.

Table: 8 Percentages of scores of students on a Conducive Learning Environment

N	access to authentic course materials	feedback from instructor	teaching and learning more effective	work according to my own pace	Mean
80	70%	69%	80%	78%	74 %

This tables shows that the Percentages of scores of students on Conducive Learning Environment is 74%.

Table: 9 Percentages of scores of students on Digital Literacy

N	knowledge of computers	Internet skills	Mean
80	92%	93%	92 %

This tables shows that the Percentages of scores of students on Digital Literacy is 92%.

Table: 10 Percentages of scores of students on Social Challenges

N	Socially isolated	Frustration	Mean

80	68%	31%	50 %

This tables shows that the Percentages of scores of students on Social Challenges is 50 %.

Table: 11 Percentages of scores of students on Technical Challenges

N	Connectivity	Lack of technical support services)	No computer access)	Mean
80	76%	48%	35%	53 %

This tables shows that the Percentages of scores of students on Technical Challenges is 53 %.

Table: 12 Percentages of scores of students on Academic Challenges

N	Difficulty in following instructions	Less Interactive	Threat of plagiarism	Grasping course material	Mean
80	29%	75%	68%	74%	62 %

This tables shows that the Percentages of scores of students on Academic Challenges 62 %.

Table: 13 Mean scores of student's perception of the advantages of blended learning

N	Interpersonal Skills	Conducive learning environment	Digital Literacy	Mean
80	45	59	73	59

This tables shows that the mean scores of student's perception of the advantages of blended learning is 59.

Table: 14 Mean scores of student's perception of the challenges of blended learning

N	Social Challenges	Technical Challenges	Academic Challenges	Mean
80	40	42	50	44

This tables shows that the mean scores of student's perception of the challenges of blended learning is 44.

Table: 15 Percentages of scores of student's perception of the advantages of blended learning

N	Interpersonal Skills	Conducive learning environment	Digital Literacy	Mean
80	56%	74%	92%	74%

This tables shows that the percentages of scores of student's perception of the advantage of blended learning is 74% .

Table: 16 Percentages of scores of student's perception of the challenges of blended learning

N	Social Challenges	Technical Challenges	Academic Challenges	Mean
80	50%	53%	62%	55%

This table shows that the percentages of scores of student's perception of the challenges of blended learning is 55%.

Table – Mean and percentages of scores on different variables of advantages of blended learning

N	**80**		
Variables	**Indicators**	**Mean**	**Percentages**
Interpersonal Skills	Communication	46	58%
	Self-Confidence	43	54%

Conducive Learning Environment	access to authentic course materials	56	70%
	feedback from instructor	55	69%
	teaching and learning more effective	64	80%
	work according to my own pace	62	78%
Digital Literacy	knowledge of computers	73	92%
	Internet skills	74	93%

Table – Mean and percentages of scores on different variables of challenges of blended learning

N	**80**		
Variables	**Indicators**	**Mean**	**Percentages**
Social Challenges	Socially isolated	54	68%
	Frustration	25	31%
Technical Challenges	Connectivity	60	76%
	Lack of technical support services)	38	48%
	No computer access)	28	35%
Academic Challenges	Following Instructions	23	29%
	Less Interactive	60	75%
	Threat of plagiarism	54	68%
	Grasping course material	59	74%

Table: Mean score and percentage of student's perception of the advantages of blended learning

N	Interpersonal Skills	Conducive learning environment	Digital Literacy	Mean	Percentage

80	45	59	73	59	74%

This tables shows that the mean scores of student's perception of the advantages of blended learning is 59 and the percentage is 74%.

Table: Mean score and percentage of student's perception of the challenges of blended learning

N	Social Challenges	Technical Challenges	Academic Challenges	Mean	Percentage
80	40	42	50	44	55%

This tables shows that the mean score of student's perception of the challenges of blended learning is 44 and the percentage is 55%.

Results and Discussion

Different variables of advantages of blended learning are interpersonal skills, a conducive learning environment, and digital literacy. The mean score of responses of students on these variables are,

Interpersonal skills 49, a conducive learning environment 59, and digital literacy73. The percentages of scores of respondents on these variables were calculated which showed that , 56%, interpersonal skills a conducive learning environment 74%, and digital literacy 92%.

Different variables of challenges of blended learning are social challenges, technical challenges, and academic challenges. The mean score of responses of students on these variables are, social challenges 40, technical challenges 42, and academic challenges 50. The percentages of scores of respondents on these variables are social challenges 50%, technical challenges 53%, and academic challenges 62%.

Different indicators of interpersonal skills are communication and self-confidence and mean score of respondents on these indicators are, communication 46, and self-confidence 43. The percentages of scores of respondents on these indicators are communication 58%, and self-confidence 54%. Similarly different indicators of Conducive Learning Environment are, access to authentic course materials, feedback from instructor, teaching and learning more effective , work according to my own pace. The mean score of responses of students on these indicators are , access to authentic course materials

56, feedback from instructor 55 , teaching and learning more effective 64 , work according to my own pace 62. The percentages of scores of respondents on these indicators are, access to authentic course materials 70% , feedback from instructor 69% , teaching and learning more effective 80% , work according to my own pace 78% . Similarly different indicators of Digital Literacy are knowledge of computers and Internet skills and the mean score of responses of students on these indicators are knowledge of computers 73, and Internet skills 74 and the percentages of scores of respondents on these indicators are, are knowledge of computers 92% , and Internet skills 93%.

Different indicators of social challenges are socially isolated and Frustration. The mean score of responses of students on these indicators are socially isolated 54, Frustration 25 and the percentages of scores of respondents on these indicators are socially isolated 68% and Frustration 31 %. Similarly different indicators of technical Challenges are Connectivity, Lack of technical support services, No computer access. The mean score of responses of students on these indicators are Connectivity 60 , Lack of technical support services 38 , No computer access 28 and the percentages of scores of respondents on these indicators are Connectivity 76% , Lack of technical support services 48% , No computer access 35% . Indicators of Academic Challenges are following Instructions, Less Interactive, Threat of plagiarism and Grasping course material. The mean score of responses of students on these indicators are Following Instructions 23, Less Interactive 60 , Threat of plagiarism 54 and Grasping course material 59 and the percentages of scores of respondents on these indicators are Following Instructions 29% , Less Interactive 75 % , Threat of plagiarism 68% and Grasping course material 74% .

So the findings showed that 74% students agreed that blended learning is successful and 55%. Students agreed that there are issues with blended learning.

Conclusion:

Findings of the study revealed success of blended learning. The responses of students showed that blended learning enhanced interpersonal skills by helping them increase in their communication and self-confidence**.** Similarly responses of students showed satisfaction as blended learning provided them with conducive learning environment by giving them access to authentic course materials, timely feedback from the instructor, ensuring self-paced learning , and making teaching and learning more effective. Moreover, most of the respondents agreed that blended learning increased digital literacy by making them get knowledge of computers and polished their Internet skills.

But at the same time there are various challenges of blended learning experienced by students such as social challenges, technical challenges, and academic challenges. The responses of the students showed that they felt socially isolated and frustrated with blended learning. Similarly, respondents showed that connectivity, lack of technical

support services, and no computer access were a few technical issues faced by them while using blended learning. Moreover, students responded that difficulty in following the instructions, grasping course material, and the threat of plagiarism were academic challenges faced by them in blended learning.

Recommendations

So by removing barriers in blended learning it can most successfully be used in higher education.

1. Orientation sessions may be arranged before the program starts.
2. Technical support services may be at the disposal of the universities for students, every time they need.
3. Educational Institutions may provide students with devices (laptops etc.) to take online classes who are in need.
4. On line programs may be designed in a way to ensure maximum participation of students during the session.
5. The instructor may create such a discussion forum in the on-line class in which participation of every individual may be mandatory to remove feeling of social isolation and frustration during the class.
6. Secondary schools may be provided with well-equipped laboratories and inter net facility. The Government may provide teachers with resources for teaching learning process.

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