

# Use of Technology in the Higher Education Systems: A Case Study

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## Abstract

Technology is playing great role in each field of our professional as well as daily life. When we talk about teaching learning process without the use of technology then it may be a nightmare for both teacher and learner. Most developed nations across the globe are using technology from lower classes to higher education. However, under developed OR less developed countries in sense of technology are striving to accelerate their technology growth and Pakistan is one of those countries who is grooming towards the research and technology. Pakistan is also using technology in teaching learning in higher education sectors. In this paper we take a survey from students of different departments of Shaheed Benazir Bhutto University Shaheed Benazir Abad, Sindh Pakistan. In this survey we asked to students about the use of technology in their studies. 172 students take part in this survey.

## Keywords:

technology use in Higher education, technology in education

## 1. Introduction

Use of technology is very mandatory in higher education sectors. In class rooms technology help students to understand the contents easily. Use of technology in class rooms increase the interactivity of students with each other and also make them more respondent. Use of computers, laptops, tablets OR smart phones in class rooms and in studies help students to search their related class work on the spot which can help and reduce teachers burden as well. Technology in education refers to the use of computer related gadgets and communication devices, and when we integrate technology with the any kind of education it brings the momentous changes in teaching learning process [1]. In this paper we had asked various questions from Shaheed Benazir Bhutto University Shaheed Benazir Abad Students regarding the use of technology.

Shaheed Benazir Bhutto University SBBU is a newly established university in rural area of Sindh province of Pakistan. Mostly students are belonging to rural areas. In this paper we had focused on the use of technology in the students' university studies. We had conducted survey from different departments of SBBU university. The rest of the paper consist of problem statement along with objectives of the research, literature review, research methodology, results and discussion, and finally paper is ended with conclusion and future work.

## 2. Problem Statement

Technology is important and playing great role in education. Use of technology boost the students' mind and helps them out in studies. Whereas in Shaheed Benazir Bhutto University Shaheed Benazir Abad mostly students belong to rural areas and in rural areas of Pakistan there is a lack of technology and students are not aware about the use of technology in their studies. So, we had tried to focus on finding the technology use in students' studies.

### 2.1 Objectives

- To find out the use of technology in students' studies.
- To find out whether students are comfortable in technology use.
- To find out whether students become more creative after the use of technology
- To find out whether technology is helping students in their studies

## 3. Literature Review

Information technology is giving quality education in higher education sectors. Higher education sectors are taking benefit of technology and making the higher education easy and also improving the quality of education in higher education sectors [4]. To enhance the performance of higher education sectors online teachings and technology computer-based assistant can be installed in class rooms which should be network based and all type of lectures automatically uploaded on particular websites so students from anywhere can study their class work with the help of technology [6]. Technology in the form of online learning, communication totally changes the traditional academic environment into modern academic which brings great transformation into higher education systems [7]. Technology help to incorporate English in academic purpose in digital literacy. With the help of digital literacy new academic norms can be developed which provide benefit in academic matters [2]. Universities and higher education institutes HEIs are data generators and generating very huge data on daily basis traditional systems are not as much fast to process these huge amounts of data then

integrating the HEIs with new technology systems can ease and process the data in no time. Large amount of data which is called big data integrated with the universities to process the big data [3]. There is an urgency for technology to be integrated with higher education systems because of competency and high standards with the new millennium standards universities should be competent and their standards should meet the digital transformation. Without technology there is a challenge for universities to compete the academic matters. To be competitive and to solve the challenges of digital literacy university class rooms must be established with well technology equipment and universities should provide different kind of trainings in this sense [5].

#### 4. Research methodology:

This research work is a survey-based research. First of we planned the questions which we asked in our survey. After that survey form was created and survey form was sent to the students. After receiving response from students, we had analyzed the answers and finally discuss the survey results. Figure 1.1 clearly indicates the step by step research method which we follow to perform this research.

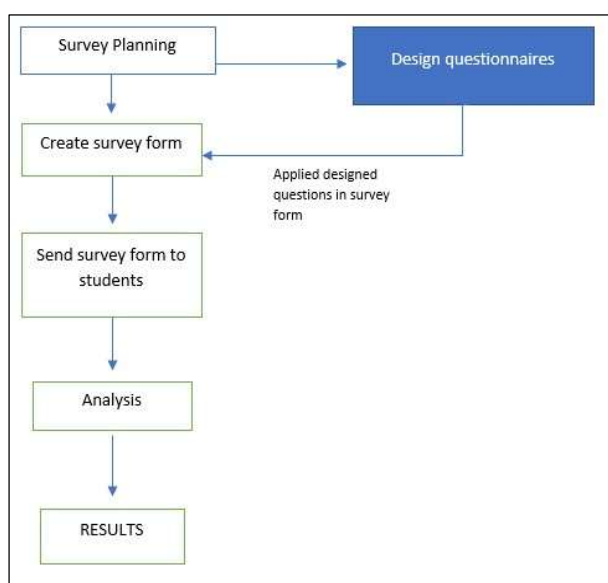


Fig. 1 Research methodology

#### 5. Survey Questions:

Following questions are used to conduct the survey.

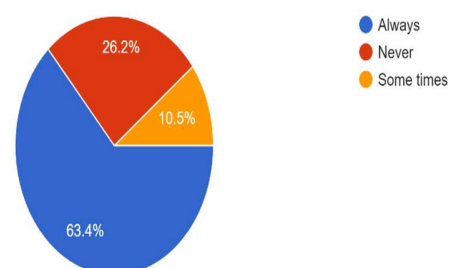
1. Do you use online materials for your learning purpose?

- A) Always B) Never C) Sometimes
2. Does technology enhance your skills?  
A) Yes B) No C) May be
  3. Does technology reduce, or enhance your creativity?  
A) Enhance creativity B) Reduce creativity
  4. Does technology provide you reliable data for studies?  
A) Always B) Never C) Sometimes
  5. Does technology increase your academic performance?  
A) Yes B) No C) May be
  6. Do you feel comfortable when you make your assignments using computer system?  
A) Always B) Never C) Sometimes
  7. Do you feel your knowledge increased when you use technology for learning?  
A) Yes B) No C) May be
  8. Do you use technology in your class rooms?  
A) Always use B) Never use C) Sometime use
  9. Do you watch online lectures of your related subject delivered by other university teachers?  
A) Always B) Never C) Sometimes

#### 6. Results and discussion:

1. Do you use online materials for your learning purpose?

172 responses

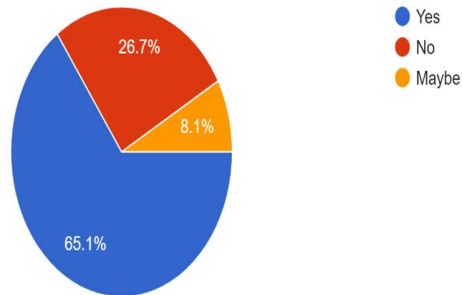


The above graph covers the 172 responses from 172 student participants and results indicates that 109 (63.4%) students

respond to the answer always, 45 (26.2%) students respond to the answer never while only 18 (10.5%) students respond to sometimes.

2. Does technology enhance your skills?

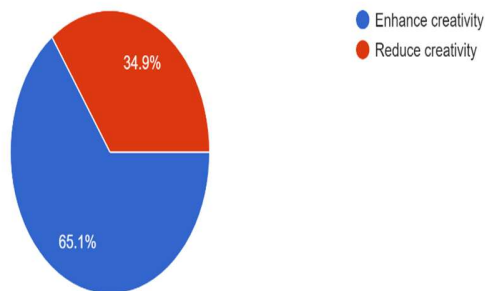
172 responses



The above graph 2 covers the 172 responses from 172 student participants and results indicates that 112 (65.1%) students respond to the answer yes, 46 (26.7%) students respond to the answer no while only 14 (8.1%) students respond to may be.

3. Does technology reduce, or enhance your creativity?

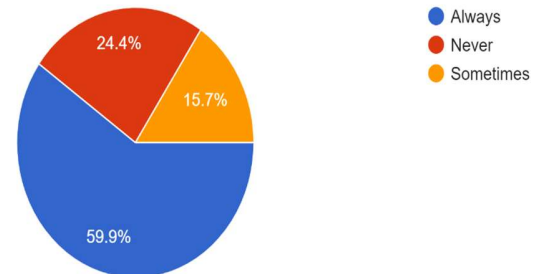
169 responses



The above graph 3 covers the 169 responses from 172 student participants and results indicates that 110 (65.1%) students respond to the answer enhance creativity, while great number of 59 (34.9%) students respond to the answer reduce creativity.

4. Does technology provide you reliable data for studies?

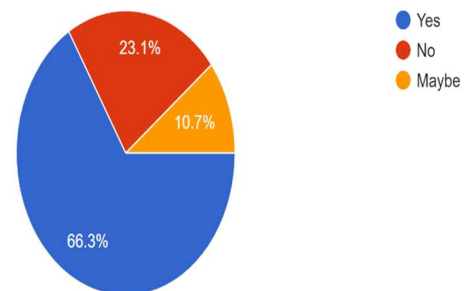
172 responses



The graph 4 covers the 172 responses out of 172 student participants and results indicates that 103 (59.9%) students respond to the answer always, 42 (24.4%) students respond to never. 27 (15.7%) students respond to sometimes.

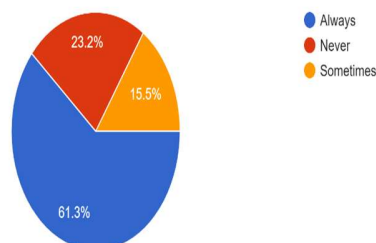
5. Does technology increase your academic performance?

169 responses



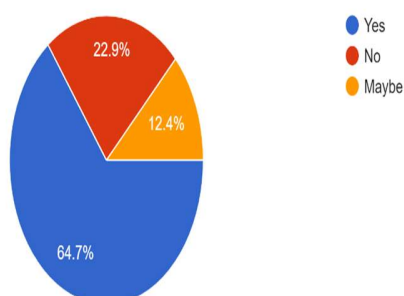
The graph 5 covers the 169 responses out of 172 student participants and results indicates that 112 (66.3%) students respond to the answer yes, 39 (23.1%) students respond to no and 18 (10.7%) students respond to may be.

6. Do you feel comfortable when you make your assignments using computer system?  
168 responses



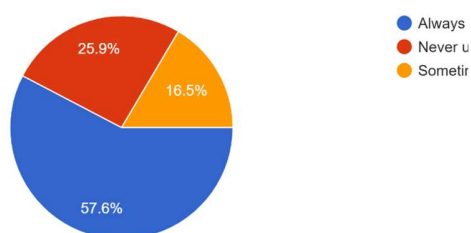
The graph 6 indicates the result of 168 responses out of 172 participants. The results show that 103 (61.3%) responses chose the option always, 39 (23.2%) responses chose the option never while 26 (15.5%) responses chose the option sometimes.

7. Do you feel your knowledge increased when you use technology for learning?  
170 responses



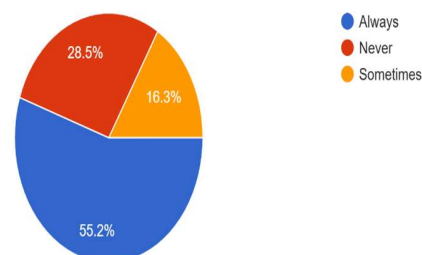
The graph 7 indicates the result of 170 responses out of 172 participants. The results show that 110 (64.7%) responses chose the option yes, 39 (22.9%) responses chose the option no while 21 (12.4%) responses chose the option maybe and two participants left the question blank.

Do you use technology in your class rooms?  
170 responses



The graph 8 indicates the result of 170 responses out of 172 participants. The results show that 98 (57.6%) responses chose the option yes, 44 (25.9%) responses chose the option no while 28 (16.5%) responses chose the option maybe and two participants left the question blank.

Do you watch online lectures of your related subject delivered by other university teachers?  
172 responses



In graph 9 all 172 participants attempt the questions and results show that out of 172 responses 95 (55.2%) answered always, a good number of responses 49 (28.5%) answers no while 28 (16.3%) responses answer is sometimes.

## 7. Conclusion and future work:

This study shows that few students are still not using technology specially in question 8 good number of student's answer is that they never used technology in their class rooms which can be alarming. However large number of student responses show that technology increase their academic performance. Good number of student's skills are developed and they are more creative too using technology in their studies. In future we will study on different technology tools which are used in teaching learning process and in future study we will conduct survey from both teachers and learners.

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