ISSN: (E) 3007-1917 (P) 3007-1909

## ANALYSIS OF TEACHERS' SKILLS IN USING TECHNOLOGY AND THEIR PERFORMANCE AT HIGHER EDUCATION LEVEL

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| Received         | Revised           | Accepted          | Published         |  |
|------------------|-------------------|-------------------|-------------------|--|
| 29 October, 2024 | 29 November, 2024 | 14 December, 2024 | 21 December, 2024 |  |

#### ABSTRACT

Technology usage has become the main influencer at all the educational levels especially at higher education level. Teachers play an important role in the implementing and executing the technology at higher education level. The objectives of this study were: to determine the skills of teachers in using technology at the higher education level and to find the performance of teachers in using technology at higher education level. The quantitative survey method was used to conduct this study. Two samples were taken one consisting of 93 teachers including 62 male teachers and 31 female teachers and other sample was consisting of 307 students including 206 male students and 101 female students by using stratified random sampling technique. Both samples were taken from the social sciences departments of Institute of Southern Punjab, Multan, Pakistan. Two questionnaires were used to collect the data from the teachers and students. One questionnaire was used for the teachers to determine the skills of the teachers in using technology and other questionnaire was used for the students to determine the performance of the teachers. The collected data was analysed by using SPSS-25. The results of the study indicated that most of the teachers of social sciences departments of Institute of Southern Punjab don't have the required skills for using the technology in teaching and learning process and also their performance was not so good.

Keywords: Teachers, Skills, Technology, Performance, Higher Education.

### INTRODUCTION

Quality education is critical for preparing students for the knowledge economy. Technology integration is stated as the application of any technical instrument to assist teaching such as the internet, online learning tools, and multimedia. The use of educational technology has been found to result in various learning benefits, despite the fact that it is extremely demanding. Enough preparation must be made for technology integration in education to be successful (Liton, 2015; Hafeez et al., 2022). A higher degree of technological knowledge does not imply that teachers have a high level of technological competence. Teachers must have the knowledge and abilities to apply technological tools to incorporate skills and knowledge in their classes by using suitable pedagogical techniques. Furthermore, when integrating technology into instructional environments, care should be made to ensure that the technology used is appropriate for the purpose of the subject matter (Teo & Milutinovic, 2015).

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Teachers' technological competency and attitudes toward instructional technology have a direct impact on how well they use technology in the classroom. Technology grasped teachers use these tools more actively and effectively during the teaching and learning process. Additionally, teachers that are technologically proficient help their students learn digital abilities. These teachers' skills have a favorable impact on the standard of instruction, which in turn helps students to learn more effectively (Shenoy et al., 2020).

Han et al. (2017) claimed that teachers' attitudes on using technology in the classroom may be viewed as a helpful factor, providing them more selfconfidence or acting as a significant obstruction to their use of technology. They further reported teachers' backgrounds, including their confidence levels, technological interests, and openness to attempt new things, are significant components that can inspire the assimilation of technology in educational system.

Technological competence is a degree of an individual's competency for using technology and technological knowledge. High technical competence will increase an individual confidence and ability to use technology in the teaching and learning process and lessen their fear. The fear of technology application will result in reducing the inspiration to utilize technology, whereas selfefficacy will enable favorable attitudes toward technology (Kumar & Daniel, 2016).

The technological competency of a teacher is a significant element for using technology in teaching (Sánchez-Prieto et al., 2016). Technological competence is a comprehensive concept that includes not just abilities but also perception, knowledge, and attitudes toward technology use. In this regard, technological competence entails the successful application of technology to gather, assess, store, generate, present, share information, interact over the internet, and engage in collaborative networks (Holmes et al., 2015).

Hourcade et al. (2018) pointed out that technological competence should be viewed as the capacity to integrate context based knowledge, abilities, and attitudes. Kafyulilo et al. (2016) divided technological competency into three categories: (i) Technology-related knowledge, theory, and principles; (ii) practical abilities for

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using technical tools and media; (iii) attitudes toward strategic usage, openness, critical understanding, creativity, accountability, and independence.

Many university teachers face difficulties in applying the suitable technological tools according to the requirements of the learning environment in the globe including Pakistan. Some of the teachers don't want to apply due to the fear of not right execution of the applied technological tool. Some teachers have no much technological knowledge and skills that how to integrate the technological tools in the teaching and learning process and some have strange perceptions about using technology in teaching and learning (Minamatov, 2021).

A teacher that has the technological competency can change the learning environments and enhances the skills of the learners. He/she knows how to integrate the suitable technological tool according to the learning materials. Research indicates that many teachers in the globe especially in developing countries face difficulties in applying the suitable technological tools according to the requirements of the learning setting and learners. They face troubleshot problems and feel nervousness in applying the technological tools in teaching and learning process (Karunaratne et al., 2018).

Singhavi and Basargekar (2019) conducted a research to determine the challenges faced by teachers in using technology in teaching and concluded that most of the teachers faced the challenges of how to apply the right technological tools in teaching according to the requirements of the subject matter. Adedokun-Shittu and Shittu (2015) stated that the Nigerian teachers faced the problems of implementing technological based curriculum due to lack of skills in using technology at higher education level.

#### **Objectives of the Study**

1. To determine the skills of teachers in using technology at the higher education level.

2. To find the performance of teachers in using technology at higher education level.

#### **Research Questions**

1. Do teachers have skills in using technology at a higher education level?

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2. What is the performance of teachers in using technology at higher education level?

### **Review of the Literature**

The effective use of technology in the classroom has been linked to a considerable rise in student success. Students acquire confidence as a result of their professors' engagement with them and occasionally when they collaborate with them as coworkers to try to solve certain technological issues. Additionally, the students use technology in class to undertake engaging activities like online searches, problem-solving, and other fascinating class activities. They also finish their own learning assignments and submit them to the instructor (Admiraal et al., 2017).

Through mobile services and online conferencing capabilities, evolving technologies in universities have offered learning opportunities that challenge established pedagogical paradigms in higher education (Vladova et al., 2021). But a number of things appear to be impeding the successful use of technology in the classroom. Particularly, some scholars have hypothesized that teacher and student technical aptitude, perception, and preparation for technology might have a big impact on how well technology is integrated into education (Fatimah & Santiana, 2017).

Sanko's (2017) investigated that teachers seldom or never used Web-based teaching in their classrooms. Despite the fact that all participants had favorable opinions of using technology and strong intrinsic motivations like personal curiosity and interest, they ran into some unanticipated challenges or barriers due to a lack of knowledge, experience, time, computer phobia, and confidence. The most prevalent reasons for not adopting technology were a lack of class time, the hassle of accessing computer facilities, and technical issues such as sluggish internet connections. They also had issues with incorporating actual materials into their textbooks. Learners are supposed to be active participants rather than passive consumers in the learning process since they manage their own learning in a technology-enhanced learning environment.

Herro et al. (2021) defined technology is a group of instruments used to gather, store, process, alter, and transmit information to computer and telecommunication systems. Data must be gathered,

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analyzed, handled, retrieved, sent, and communicated in a variety of media, including audio, visual, and audio-visual. It also entails knowing how to look for and use information on the internet, radio, television, telephone, video, tape recorders, and computers.

In the twenty-first century, technology has in most nations become the primary means of knowledge transfer. Today's breakthroughs in technology integration have benefited our society and fundamentally altered the way people think, work, and live. As a result, technological integration into the curriculum is something that both schools and other educational institutions need to think about (Ghavifekr & Rosdy, 2015).

Recent study has shown that integrating technology during education requires competencies and that are not identical from using computers, thus it is not thought of as the use of computers. For the integration of technology in education, instructors at higher education institutions need to possess a certain set of skills and knowledge. The incorporation of technology during teaching entails taking into account the requirements of the students, the institution's program, accessible technology, lesson planning, and media designing difficulties and combining them into a practice that will support the learning of the students (Ata et al., 2021).

When it comes to employing technology in the classroom, teachers' preparedness and competence are crucial since they need to have the technical skills they need to incorporate it into their lessons and feel comfortable doing so. Cantu and Warren (2016) indicated that technology-related courses offered to teachers with the aim of successfully integrating technology into the teaching and learning process are insufficient to adequately prepare them for instruction. Teachers must have undeniable knowledge in order to properly integrate the material that has to be taught in higher education programs. Scalise (2018) showed that teaching technology integration requires instructors to possess a variety of abilities in order to address all the challenges that arise when integrating technology into teaching and learning.

Technological skills are the knowledge and abilities needed to operate computer-based technologies and carry out technological tasks. Because they are frequently learned through formal education,

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practice, and training, technology skills are regarded as hard skills. These abilities are useful for handling technological, scientific, mechanical, and mathematical challenges. In addition to general abilities, technological skills appear to be key to people's future life happiness in today's information society. Age, income, and the crucial 21st-century skills of critical thinking, problem-solving, communication, and technology were found to favorably influence life satisfaction (Manco-Chavez et al., 2020).

Teachers must be equipped with the necessary skills, abilities, perspectives, and information to fully utilize technology in the classroom if effective technology integration is to occur. The integration of technology into teaching and learning is a challenging, dynamic process. If classroom teachers cannot better integrate technology integration development, effective technological integration in education cannot be achieved. The acquisition of competencies, abilities, and knowledge about the use of contemporary technology integration within the process of professional improvement and growth is a crucial element of training programs for teachers (Hanshaw & Hanson, 2019).

#### **Technological Skills and Performance**

The research on how technology affects employment and skills reveals two major patterns. First, pessimistic beliefs about job losses brought on by technology have been replaced by more upbeat projections of a net rise in jobs. However, new positions may become available in unrelated industries and necessitate the development of fresh talents. The chance that new jobs will need higher level cognitive abilities and non-routine, nonmechanized work is the second important development. You'll be abler to keep up with these changes in the nature of work, which will demand ongoing learning, if you can and want to unlearn and relearn (Khan, 2017).

Teachers in the modern technological era are expected to grow professionally in line with advancements in science, technology, and society. Professional instructors should be able to comprehend the elements of applicable educational ideas in order to comprehend the basis and policy of education, the developmental stage of learners, and the teaching methods that correspond with the ISSN: (E) 3007-1917 (P) 3007-1909

course contents. The teaching strategies and learning resources affect how well students learn. There is hope for improved communication interactions via the use of assistive technologies in the form of media so that it can function properly and produce the best outcomes possible (Andiola et al., 2020).

The skills that students acquire as a result of the learning process are known as learning outcomes, and both internal and external variables can affect them. Therefore, in the age of technology, instructors are expected to be computer savvy, and the digital age will bring about transformation and creative potential. A teacher's performance demonstrates his or her creative ability, and performance depends on reciprocity and cooperation in order to be successful. Performance is the aptitude for labor displayed by a person to produce outcomes. It is the same as professional success (Mavinkurve & Patil, 2016).

Performance is the accomplishment of certain task quality standards, which can eventually be seen in the product or quality generated. The output, or quality of the work, is connected to the outcomes of the work execution, which can be both non-physical and non-material. Internal factors that affect a teacher's success include competence, motivation, and level of commitment (Huda et al., 2017).

### Research Methodology Research Design

The most notable characteristic of survey design is that it increases the proportion of individuals who participate. This lays the way for adaptable, dependable, and somewhat objective analysis (Lam & Ducreux, 2013). The quantitative survey based research designed was adopted for this study to analyse the teachers' skills in using technology and their performance at higher education level.

### Sampling Technique and Sample Size

This study was done by taking two samples from the Institute of Southern Punjab, Multan, Pakistan. One sample was consisted of teachers of six social sciences departments (Education, Economics, Sociology, Psychology, Mass communication and Management Sciences) taken by using stratified random sampling technique and the other sample was taken from the students of social sciences

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departments (Education, Economics, Sociology, Psychology, Mass communication and Management Sciences) by using stratified random sampling technique. The teachers' sample was consisted of 93 teachers including 62 male teachers and 31 female teachers. The students' sample was consisted of 307 including 206 male students' and 101 female students.

#### **Development of Data Collection Tools**

Two questionnaires were adopted from the previous studies done by (Afari & Achampong, 2010; Mills & Gay, 2019). One questionnaire was for the

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teachers to determine their skills for using technology in higher education level and the other questionnaire was for the students to determine the performance of teachers in using technology at higher education level. The five point Likert scale was used in these questionnaires having options as Strongly Disagree, Disagree, Neutral, Agree and Strongly Agree.

#### Analysis of Data

The data was analysed by using descriptive and correlational analysis through SPSS-25.

#### Results

#### **Analysis of Demographics Information**

| Table 1: Gender Wise Frequency Distribution for teachers' Sample |        |    |      |  |  |  |  |
|--|--------|----|------|--|--|--|--|
| Sr. No. Gender Frequency Percentage (%)                          |        |    |      |  |  |  |  |
| 1  | Male   | 62 | 67%  |  |  |  |  |
| 2  | Female | 21 | 33%  |  |  |  |  |
| Total  |        | 93 | 100% |  |  |  |  |

Table 1 shows the frequency distribution of gender for teachers' sample. There were total 93 teachers from which 62 were male teachers and 21 were female teachers. The male teachers were 67 % and female teachers were 33%.

#### Table 2: Gender Wise Frequency Distribution for Students' Sample

| Sr. No. | Gender | f   | Percentage (%) |
|---------|--------|-----|----------------|
| 1       | Male   | 206 | 67%            |
| 2       | Female | 101 | 33%            |
| Total   |        | 307 | 100%           |

Table 2 shows the frequency distribution of gender for students' sample. From the total 307 respondents, 206 were male students and 101 were female students. The percentage of male students was 67% and it was 33% for female students.

#### Skills of Teachers in Using Technology

The first objective of this research was "To determine the skills of teachers in technology at

higher education level" and the research question related to this objective was "Do teachers have skills in using technology at higher education level? To achieve this intended objective and to find the answer to the research question, descriptive analysis was applied. The results of descriptive statistics are shown in Table 3.

| Table | 3: | Skills | of T | eachers | in | Using | Technology |
|-------|----|--------|------|---------|----|-------|------------|
|       |    |        | -    |         |    |       |            |

| Sr. No | Statement   |      | SD    |
|--------|---|------|-------|
| 1      | I can complete a task using technology without calling someone to help me |      | 0.885 |
| 2      | I feel confident using technological tools for classroom interactions     | 2.34 | 0.935 |
| 3      | I feel confident in using technology for teaching contents                |      | 0.763 |
| 4      | I feel competent in using technology in teaching                          |      | 0.601 |
| 5      | I can use advanced technological tools like SPSS, Statistics, etc. for    | 2.32 | 0.611 |
|        | research purposes   |      |       |

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Overall

Table 3 shows the results of the descriptive statistical analysis of the skills of teachers in using technology at the higher education level. The table shows that the mean value (M) for the statement that I can complete a task using technology without calling someone to help me was 3.44 and the value of standard deviation (SD) was 0.885. As the mean value is less than 3 so, most of the teachers don't have the skills to complete a task using technology without calling someone to help them. The M value for the statement that I feel confident using technological tools for classroom interactions was 2.34 and the value of SD was 0.935. As the mean value is less than 3 so, most of the teachers don't feel confident using technological tools for classroom interactions. The M value for the statement that I feel confident in using technology for teaching content was 2.22 and the value of SD was 0.763. As the value of the mean is less than 3 so, most of the teachers don't feel confident in using technology for teaching content. The M value for the statement that I feel competent in using technology in teaching was 2.32 and the value of SD was 0.601. As the mean value is less than 3 so, most of the teachers don't feel competent in using ISSN: (E) 3007-1917 (P) 3007-1909

2.67 0.752

technology in teaching. The M value for the statement that I can use advanced technological tools like SPSS, Statistics, etc. for research purposes was 2.32 and the value of SD was 0.611. As the mean value is less than 3 so, most of the teachers don't have the skills to use advanced technological tools like SPSS, Statistics, etc. for research purposes. The overall mean value was 2.67 and the value of SD was 0.752. As the mean value was less than 3 so, most of the teachers of social science departments stated that they don't have the skills to use technology in teaching at a higher education level.

#### **Teachers' Performance in Using Technology**

The second objective of this research was "To determine the performance of teachers in using technology at higher education level and the research question regarding this objective was "What is the performance of teachers in using technology at higher education level? To achieve this intended objective and to find the answer of the research question, the descriptive statistical analysis was used. The results of statistical analysis are shown in table 3.

| Sr. No | Statements   | DA (%) | N     | A (%) | M    | SD    |
|--------|--|--------|-------|-------|------|-------|
|        |  |        | (%)   |       |      |       |
| 1      | My teacher knows much about technology   | 74.6%  | 12.2% | 13.2% | 2.61 | 0.861 |
| 2      | My teacher feels relax while using technology during lecture   | 76.4%  | 11.1% | 12.5% | 2.50 | 0.965 |
| 3      | My teacher solves the technical problems efficiently   | 79.7%  | 10.2% | 10.1% | 2.35 | 1.032 |
| 4      | My teacher has sufficient knowledge about how to use technological tools in teaching                                       | 77.7%  | 12.1% | 10.2% | 2.44 | 0.972 |
| 5      | My teacher knows the recent developments of technology used in teaching  | 78.7%  | 11.3% | 10%   | 2.36 | 1.092 |
| 6      | My teacher has sufficient knowledge to teach the technology related courses effectively                                    | 78.6%  | 12%   | 9.4%  | 2.33 | 1.092 |
| 7      | My teacher has sufficient skills to use advanced<br>technological tools like SPSS, Statistics etc. for research<br>purpose | 78.7%  | 11.9% | 9.4%  | 2.34 | 1.091 |
| 8      | My teacher is competent in using technology  | 83.2%  | 7.5%  | 9.3%  | 2.06 | 1.215 |
| 9      | My teacher feels confident in using technology   | 73.6%  | 14.7% | 11.7% | 2.62 | 0.823 |
| 10     | My teacher has sufficient technological skills to improve the learning process   | 76.2%  | 14.4% | 9.4%  | 2.43 | 0.978 |
| 11     | My teacher effectively performs the teaching related activities by using technology  | 76.4%  | 11.6% | 12%   | 2.66 | 0.801 |

 Table 3: Teachers' Performance in Using Technology at Higher Education

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| 12 | My teacher has skills to search the up to date contents by using different websites                              | 76.9% | 10.1% | 13%     | 2.49 | 0.934 |
|----|--|-------|-------|---------|------|-------|
| 13 | My teacher executes the application of technology into useful learning   | 74.1% | 12.5% | 13.4%   | 2.59 | 0.849 |
| 14 | My teacher knows how to deliver online lecture using technological tools like Microsoft teams, zoom meeting etc. | 76.1% | 12.2% | 11.7%   | 2.65 | 0.802 |
| 15 | My teacher knows how to manage the technological tools during teaching   | 75%   | 10.2% | 14.8%   | 2.87 | 1.001 |
| 16 | My teacher has enough knowledge to give right direction to<br>the students for using technological tools         | 80%   | 7.1%  | 12.9%   | 2.40 | 0.979 |
| 17 | My teacher has clear concepts and understanding about how<br>to use the different technological tools            | 78.7% | 11.3% | 10%     | 2.36 | 1.092 |
| 18 | My teacher knows how to use the right tools according to the requirement of the subject matter                   | 77.7% | 12.1% | (10.2%) | 2.44 | 0.972 |

Table 4 shows the statement wise results of descriptive statistical analysis of students' perceptions about their teachers' performance in use of technology. The interpretation of these results are given as:

1. In response to the statement that my teacher knows much about technology, 74.6% students disagreed with the statement, 12.2% students remained neutral and 13.2% students agreed with the statement that their teachers know much about technology. The mean score for this statement was 2.61 with SD 0.861. As the mean value was less than 3.00, which displays that most of the students disagreed with the statement that their teachers know much about technology.

2. In response to the statement that my teacher feels relax while using technology during lecture, 76.4% students disagreed with the statement, 11.1% students remained neutral and 12.5% students agreed with the statement that their teachers feel relax while using technology during lecture. The mean score for this statement was 2.50 with SD 0.965. As the mean score was less than 3.00, which shows that most of the students disagreed with the statement that their educators feel relax while using technology during lecture.

3. In response to the statement that my teacher solves the technical problems efficiently, 79.7% students disagreed with the statement, 10.2% remained neutral and 10.1% students agreed with the statement that their teachers solve the technical problems efficiently. The mean score for this statement was 2.35 with SD 1.032. As the mean value was less than 3.00, which shows that most of the students disagreed with the statement that their teachers solve the technical problems efficiently.

4. In response to the statement that my teacher has sufficient knowledge about how to use technological tools in teaching, 77.7% students disagreed with the statement, 12.1% students remained neutral and 10.2% students agreed with the statement that their teachers have sufficient knowledge about how to use technological tools in teaching. The mean score for this statement was 2.44 with SD 0.972. As the mean value was less than 3.00, which displays that most of the students disagreed with the statement that their teachers have sufficient knowledge about how to use technological tools in teaching.

5. In response to the statement that my teacher knows the recent developments of technology used in teaching, 78.7% students disagreed with the statement, 11.3% students remained neutral and 10% students agreed with the statement that their teachers know the recent developments of technology used in teaching. The mean score for this statement was 2.36 with SD 1.092. As the mean value was less than 3.00, which displays that most of the students disagreed with the statement that their teachers know the recent developments of the students disagreed with the statement that their teachers know the recent developments of the students disagreed with the statement that their teachers know the recent developments of technology used in teaching.

6. In response to the statement that my teacher has sufficient knowledge to teach the technology related courses effectively, 78.6% students disagreed with the statement, 12% students remained neutral and 9.4% students agreed with the statement that their teachers have sufficient knowledge to teach the technology related courses effectively. The mean score for this statement was 2.33 with SD 1.092. As

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the men value was less than 3.00, which shows that most of the students disagreed with the statement that their teachers have sufficient knowledge to teach the technology related courses effectively.

7. In response to the statement that my teacher has sufficient skills to use advanced technological tools like SPSS, Statistics etc. for research purpose, 78.7% students disagreed with the statement, 11.9% students remained neutral and 9.4% agreed with the statement that their teachers have sufficient skills to use advanced technological tools like SPSS, Statistics etc. for research purpose. The mean value for this statement was 2.34 with SD 1.091. As the mean value was less than 3.00, which displays that most of the students disagreed with the statement that their teachers have sufficient skills to use advanced technological tools like SPSS, Statistics etc. for research purpose.

8. In response to the statement that my teacher is competent in using technology, 83.2% students disagreed with the statement, 7.5% students remained neutral and 9.3% students agreed with the statement that their teachers are competent in using technology. The mean score for this statement was 2.06 with SD 1.215. As the mean value was less than 3.00, which shows that most of the students disagreed with the statement that their educators are competent in using technology.

9. In response to the statement that my teacher feels confident in using technology, 73.6% students disagreed with the statement, 14.7% students remained neutral and 11.7% students agreed with the statement that their teachers feel confident in using technology. The mean score for this statement was 2.62 with SD 0.823. As the mean value was less than 3.00, which shows that majority of the students disagreed with the statement that their teachers feel confident in the statement that the statement with shows that majority of the students disagreed with the statement that their teachers feel confident in using technology.

10. In response to the statement that my teacher has sufficient technological skills to improve the learning process, 76.2% disagreed with the statement, 14.4% students remained neutral and 9.4% students agreed with the statement that their teachers have sufficient technological skills to improve the learning process. The mean score for this statement was 2.43 with SD 0.978. As the mean value was less than 3.00, which shows that most of the students disagreed with the statement that their ISSN: (E) 3007-1917 (P) 3007-1909

teachers have sufficient technological skills to improve the learning process.

11. In response to the statement that my teacher effectively performs the teaching related activities by using technology, 76.4% students disagreed with the statement, 11.6% students remained neutral and 12% students agreed with the statement that their educators effectively perform the teaching related activities by using technology. The mean value for this statement was 2.66 with SD 0.801. As the mean value was less than 3.00, which shows that most of the students disagreed with the statement that their teachers effectively perform the teaching related activities by using technology.

12. In response to the statement that my teacher has skills to search the up to date contents by using different websites, 76.9% students disagreed with the statement, 10.1% students remained neutral and 13% students agreed with the statement that their teachers have has skills to search the up to date contents by using different websites. The mean value for this statement was 2.49 with SD 0.934. As the mean value was less than 3.00, which shows that most of the students disagreed with the statement that their teachers have has skills to search the up to date contents by using different websites.

13. In response to the statement that my teacher executes the application of technology into useful learning, 74.1% students disagreed with the statement, 12.5% students remained neutral and 13.4% students agreed with the statement that their teachers execute the application of technology into useful learning. The mean value for this statement was 2.59 with SD 0.849. As the mean value for this statement was less than 3.00, which shows that majority of the students disagreed with the statement that their teachers execute the application of technology into useful learning.

14. In response to the statement that my teacher knows how to deliver online lecture using technological tools like teams, zoom meeting etc., 76.1% students disagreed with the statement, 12.2% students remained neutral and 11.7% students agreed with the statement that their teachers know how to deliver online lecture using technological tools like teams, zoom meeting etc. The mean value for this statement was 2.65 with SD 0.802. As the mean value was less than 3.00, which shows that most of the students disagreed with the statement

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that their teachers know how to deliver online lecture using technological tools like teams, zoom meeting etc.

15. In response to the statement that my teacher knows how to manage the technological tools during teaching, 75% students disagreed with the statement, 10.2% students remained neutral and 14.8% students agreed with the statement that their teachers know how to manage the technological tools during teaching. The mean score for this statement was 2.87 with SD 1.001. As the mean value was less than 3.00, which shows that most of the students disagreed with the statement that their teachers know how to manage the technological tools during teaching.

16. In response to the statement that my teacher has enough knowledge to give right direction to the students for using technological tools, 80% students disagreed with the statement, 7.1% students remained neutral and 12.9% students agreed with the statement that their teachers have enough knowledge to give right direction to the students for using technological tools. The mean score for this statement was 2.40 with SD 0.979. As the mean value was less than 3.00, which shows that most of the students disagreed with the statement that their educators have enough knowledge to give right direction to the students for using technological tools.

17. In response to the statement that my teacher has clear concepts and understanding about how to use the different technological tools, 78.7% students disagreed with the statement, 11.3% students remained neutral and 10% students agreed with the statement that their teachers have clear concepts and understanding about how to use the different technological tools. The mean value for this statement was 2.36 with SD 1.092. As the mean value was less than 3.00, which shows that most of the students disagreed with the statement that their educators have clear concepts and understanding about how to use the different technological tools.

18. In response to the statement that my teacher knows how to use the right tools according to the requirement of the subject matter, 77.7% students disagreed with the statement, 12.1% students remained neutral and 10.2% students agreed with the statement that their teachers know how to use the right tools according to the requirement of the

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subject matter. The mean value for this statement was 2.44 with SD 0.972. As the mean value for this statement was less than 3.00, which shows that most of the students disagreed with the statement that their teachers know how to use the right tools according to the requirement of the subject matter.

### Discussion

The objectives of this research study were to determine the skills of teachers in using technology at the higher education level and to find the performance of teachers in using technology at higher education level. Technology has become an essential part of our daily personal and professional significantly improved lives and has the performance of systems in every field of life. The use of technology in teaching provide students with creative and collaborative opportunities through meaningful learning activities. Emerging technologies have created learning opportunities that challenge traditional pedagogical approaches in learning through different technological devices (Kurbonov & Istamova, 2021).

Manco-Chavez et al. (2020) proposed that technological skills are the knowledge and abilities needed to operate computer-based technologies and carry out technological tasks. Because they are frequently learned through formal education, practice, and training, technology skills are regarded as hard skills. These abilities are useful for handling scientific, mechanical, technological, and mathematical challenges. The findings of the current study regarding the skills of teachers in technology showed that most of the teachers don't have skills regarding the use of technology in the teaching and learning process. The mean value for the skills of teachers in using technology was 2.67 indicating that most of the teachers of social sciences departments don't have skills for using technology in the teaching and learning process. The performance of teachers was also determined and it resulted that most of the teachers of social sciences departments don't have the abilities to execute the technology in teaching and learning process.

#### Conclusion

The first objective of this study was to find the skills of teachers in using technology at university

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level. The results indicated that most of the teachers don't have skills to use the technology in teaching and learning process. So, it was concluded that teachers don't have technology skills at higher education level. The second objective of the study was to determine the performance of teachers in using technology at higher education level. The findings indicated that performance of most of the teachers were not good at higher education level.

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