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E-Learning Adoption and Impact on Undergraduate Students: A Case Study of Malakand University

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Abstract

E-learning has become a prominent feature of modern educational landscapes, offering flexibility and accessibility to students across various academic institutions. This study investigates the implementation and impact of e-learning on undergraduate students at Malakand University, focusing on their attitudes towards this mode of education. Factors such as computer literacy, internet experience, and overall technology acceptance are considered. Employing a descriptive approach grounded in a quantitative research design, data were collected through a paper-based structured questionnaire administered to 200 BS-level students. The research instrument was validated and reliable, and data analysis involved percentages, frequencies, and ordinal regression techniques. Findings reveal positive attitudes towards e-learning, emphasizing its efficiency, accessibility, and benefits for academic activities. Strong relationships were observed between e-learning acceptance, interest in computers, and the usefulness of computer technology. However, no significant relationship was found between ease of computer use and e-learning adoption. This study contributes valuable insights for educational policies and practices, particularly in enhancing e-learning experiences for undergraduate students.

Keywords: E-learning, Undergraduate Students, Attitudes, Technology Acceptance, Malakand University.

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Introduction

The landscape of education has evolved significantly in recent years, transcending the boundaries of traditional academic institutions. Notable advancement in this realm is the widespread adoption of e-learning, which offers novel avenues for teaching and learning across educational institutions globally. E-learning, encompassing various technological tools and platforms, presents opportunities for enhanced instructional delivery and knowledge dissemination. However, its implementation and impact vary across different contexts, posing unique challenges and opportunities.

Policies have been made to improve and provide standard education facilities to people in easy and modern ways. In this regard, to make better and facilitate teachers and students, many governments are trying to improve technology. Despite investment in these projects, some countries of the world have not improved education and the system of education by facilitating the students' school and teachers (Buabeng-Andoh, 2012). It is widely implemented in the development of information technology and for the development for providing new learning occasions to develop well-designed, learner-centered, reciprocal, economical, more efficient, elastic and friendly e-learning climate in the university (Khan, 2005). Similarly, Ellis et al., (2009) have also found useful and strong positive connection between the e-learning variables, approaches of the aspect of e-learning and accomplishment.

Board and comprehensively study of the literature argued that there is a beneficial and positive inter-connection between the student’s enthusiasm towards e-learning, the significance and satisfaction of using of computer. Superiority of the early research work describes the hurdles in use of e-learning and the elements which influence the student’s excitement towards e-learning. However, few studies have fully inspected the attitude of undergraduate students towards e-learning. The topic of the recent research study is to evaluate the attitude of university level undergraduate students towards e-learning in Malakand University. So, keeping in view the requirement and significances, the aims of this survey settled in analyzing the attitude of the students about e-learning at BS Level.

This research focuses on exploring the implementation and impact of e-learning on undergraduate students at Malakand University. Central to this investigation is an examination of students' attitudes towards e-learning, considering factors such as computer literacy, internet experience, and overall technology acceptance. By delving into these aspects, the study aims

to shed light on the dynamics of e-learning adoption at the undergraduate level, providing insights for informed educational policies and practices. E-learning is the cry of the day and same is the case in Pakistan at the beginning level. The government and other educational organizations have made policies to implement the e-learning in the field of education at university level. So, this study will be significant because it is applicable to teachers, students, university administrators, education mentors and in-service personnel.

This study has facilitated in making the policies concerning e-learning and their implementation. Likewise, the literature on barriers in use of e-learning application are available, but there is not so much work done in case of determining the attitude of undergraduate level students towards e-learning. Likewise, another argues of carrying out this study is the deficiency of competent evidence on the attitude of undergraduate students towards e-learning especially for Pakistan. Although a number of studies have been carried out to evaluate different prospects of e-learning, but the literature on examining attitude of students towards e-learning in the case of Pakistan at undergraduate levels is completely insufficient. Hence, the present study employs a modern methodology and undertakes to fill this gap in literature on attitude of BS level students towards e-learning.

Literature Review

The literature surrounding e-learning provides a comprehensive overview of its significance, modes, adoption factors, uses, and student attitudes. E-learning has been recognized for its role in increasing the availability and quality of teaching-learning processes, particularly for students facing various constraints. It offers opportunities for enhanced critical thinking, problem-solving, communication, and independent learning skills. The adoption of e-learning is driven by factors such as advancements in information technology, improved access to resources, and its suitability for diverse learners. Studies have highlighted the diverse uses of e-learning across sectors, including education, NGOs, government, and the private sector. In the context of undergraduate education, e-learning has evolved from merely using computers for instruction to becoming a preferred method for delivering teaching skills and information. Despite varying results, satisfaction with e-learning is often linked to positive learning outcomes and student engagement. Student attitudes towards e-learning are influenced by demographic variables, prior experience with technology, and perceived benefits such as improved problem-solving skills. While e-learning offers merits such as independence,

flexibility, and accessibility, challenges such as potential isolation and technical issues persist. Nevertheless, strategies for efficient integration, including online teacher availability and improved learning environments, have been proposed to enhance the effectiveness of e-learning.

Pattern / Modes of e – learning: E-learning instructional techniques encircle all the instructional accesses involving the use of electronic medium for direction. This contains Computer Assisted Instruction (CAI) and online/mobile/web and also learning through tapes, radio, television and internet. E-learning literally means electronic learning. The use of e-learning in instruction assumes the main rules of unreal intelligence.

Reason for adoption of e-learning: According to Jamlan (2004) in education system e-learning is applied and adopted for some effective reasons. In first for learning and academic education technology of information is growing and has set up a better delivery of e-learning. Secondly, e-learning provides better information resources to instructors and students to approach everywhere and anytime to these resources. Number third, e-learning is an optional learning strategy; e-learning is approachable to disables people. Last indistinguishable learning access; more students can approach to useful resources with the help of e-learning (Sanders, 2001).

Uses of E-learning: All types of organizations such as education, NGOs, government and private sector used e-learning throughout the world. The main aim to use e-learning is to increase the learners, learning and save his expenses. With the help of e-learning, it is easy to reach geographically detached various groups to facilitate learning, provide congruity, to ascertain submission for making better productivity. In some businesses e-learning is used to present their business concern, goods and services for sustain concern, opening and for maintaining software's updates. Most institutions use e-learning to expand the scope of academic education. For Class assignments e-learning help students to submit it through online and provide more materials comparing to common text books.

The use of E-learning in Undergraduate Level Education: In beginning phases of e-learning, to increase the process of teaching and learning computer was used for instructions. Presently e learning looks like a scheme of option to deliver skills of teaching and various information's at undergraduate level of in education (Kenny, 2002). Undergraduate studies have reflected the use of the e-learning. Though there are some unstable and obstacle result

have been noted. On the bases of online education results have pointed out that the satisfaction of program looks to concentrate experience of online learning for users, while Positive learning results are given to concentrate on student's base of learning knowledge and attainment set. Yurt et al. (2014) conducted a survey on "Attitude Towards Educational Technology Among Bachelor of Education Learners" and concluded that these learners are interested in adopting technology. Likewise, Al-Fahad (2009) conducted the study and ended that mobile learning is widely adopted by the student society. Most learners shown that the mobile networks enhance the tractability of approach to learning materials and to changeable devices like computer lab resources in learning have shown that they could work independently of changeable resources like lab or library PCs. The study results of Woo & Kimmick (2000) showed that e-learning is consuming and is unmanageable to times.

Student attitude toward e- learning: Ajzen & Fishbein (1980) pointed that attitudes are something that may have positive or negative rating of objects, peoples, or positions that prepare our acting and feeling in various ways of positive or negative. Various studies have highlighted the students' attitudes on computer. Demographic variables are also reasoned crucial in explicating attitudes toward online knowledge. Likely Given mutable has well led toward the creation of the attitude of e-learning and computer in context of education.

Positive attitudes toward e -learning: Olliges et al., (2000) studied that those learners who used Web CT for their course, they reasoned the e-learning course resources helpful for the experience of learning. Sanders and Morrison-Shelter (2001) studied biological science students' attitude about e-learning. They noticed effective outcomes were positive on their various skills such as problem solving, critical thinking and learning. Paris (2004) also evaluates the cognitive, behavioral and affective attitudes of 52 students of a government school in Australia, to know students' interest in e-learning study. His outcomes showed that student took interest well towards e-learning program; even gender wise results were different in attitudes. Their mutual relation was positive between the attitudes and internet users towards e-learning. In a quantitative view study, using a structured questionnaire arranged at the University of Taiwan, School of Nursing, to search the nurses' attitude and interest about e-learning, they observed that students had positive attitudes toward e-learning and they showed that the use of Internet and learning through it are workable method of learning because of the given benefits tractability, time, place and appliances (Yang, 2006).

Negative attitudes towards e-Learning: Even so, negative attitudes and student reactions to online learning are described with low grade computer skills, technological trouble, and computer hardware problems, likewise weak study skills, low motivation, and a disability to work independently (Smith et al., 2000), Another component described as producing negative knowledge of online learning is the regard that online classes lack personal contact with the instructor and other students. Research reports have shown that students feel separation and loneliness when need to face a computer. Those students who lose the confronting communication with learners and the instructors found in the traditional classroom. Moreover, Furlong, et al., (2000) tried an assorted method plan to survey around 800 various grade school's use of internet and attitude in UK, the researchers noted that some students gave preference to use the computer at home and show positive attitudes towards it, while others disliked to use it at school as their responses were totally negative.

Factors creating problems for e – learning: Various research studies have pointed out some factors which make troubles for students in the adoption of e-learning program. There were most learners in a different kind of courses who showed disappointment with problems akin to learning with online learning. Furlong et al., (2000) they noted that learners had disappointment with slow internet at school and got problems with program system. Barron (2001) indicated that technological advancement and technical support are the main subscribers to the potency of the e-learning scheme. A survey conducted at the University of Malaysia Sarawak of web-based environment. His determination disclosed that students liked face-to-face classes as compared to pure online study. They said that students preferred printed text internet for common communication another, survey conduct with students at the University of Bristol, England by. He noticed various technical problems which created disappointment, containing weak Internet connections and difficulties approaching their web-based study from home and other places. Like that, Hall & Higgins (2005) pointed that learners got disappointment with technical issues such as detains and interruptions with using hypermedia whiteboards. Commonly speaking, negative responses with e-learning might be due to the students' troubles and confusion of computer terminology jargon. They noticed that technical problems are hard to avoid with technology courses, there were some surveys that showed students required well resources of training and best knowledge of experience when they use technology.

International trends in E – Learning: E-learning has been widely used throughout the world. There are some developed countries which have completely implemented the e-learning system

at university levels as well at school levels of education. Presently there are two content delivery models in Canada: wholly virtual schools from where students approach to their totally academic course and hybrid models, from where students gain a portion of their entire program on-line. According to National Centre on Accessible Information Technology in Education in U.S., there are various states that started online schools. They have around 12, around 32 of its supported internets based developmental profession, testing online programs, and schools of virtual, around 25 started schools cyber charter, and 5 for promoting online learning schools. Researchers have observed that there are positive stages which are obtainable through attitude (Bertea, 2009). To promote new system of learning, learners must show attitude toward it. Learner's attitude about e-learning will be positive towards e-learning, if they have experience in the use of technologies, have patience and are able to the time. Otherwise, if they haven't these abilities, they will not able of this (Bertea, 2009). To find out different information system the term technology acceptance model is used.

National / Pakistani Approach towards E- Learning: The use of e-learning system in Pakistan is at very low stage. For this low stage there are different reasons responsible for the slow growths of e-learning system in Pakistan. Anyway, the government has started some projects with the help of foreign NGOs on e-learning in different areas of the Pakistan. Presently, Higher Education Commission of Pakistan with the help of US-AID implements the Learning Management System (LMS) in different universities of the country including University of Malakand.

Challenges to E-Learning: E-learning is facing many challenges of application in education sectors distinguishing the skills needed by registered students; to assess the advancement of learners; distinguishing the suitable teaching methodology; to select the needed tools and sources of labs which are use with e-learning in various programs; interaction with national and international organization of education systems; budgeting the expense of tools; calculating the base of peoples and technologies needed; evaluating the satisfaction of learners and teachers; requirements of different software and hardware and changes which students are facing (Muhammad, 2012).

Methodology: A simple random sampling technique was utilized to select a sample of 200 BS level students, determined using the Rou soft online formula. The research instrument, a structured questionnaire, was designed based on past research and empirical approaches. It

consisted of 25 Likert-scale statements assessing students' attitudes towards e-learning. Validity was ensured through expert checks and a pilot study involving 20 students. Cronbach's alpha was applied for reliability analysis, achieving a 90% value. The questionnaire was administered to 200 BS level students, collecting data on attitudes using a Likert scales ranging from strongly disagree to strongly agree. Data analysis involved presenting collected data in four tables, utilizing percentages and frequencies for analysis. Ordinal regression technique was employed to test hypotheses related to e-learning, students' interest in computers, computer usefulness, and ease of use. The study was delimited to BS level students at Malakand University, with a sample size of 200 students.

Data Analysis: This chapter deals with the presentation of the data collected through the research instrument from the respondents (students) for analysis and interpretation. The instrument (questionnaire) administered to the sample size recorded 200 (96.6%) return rate as 7 (3.3%) copy of the questionnaire distributed was not returned. This information is shown in table 4.1 below:

Table-No: To study students' attitude towards the acceptance of e-learning at BS level

S. No	Statements	SDA *f(%)*	DA *f(%)*	UD *f(%)*	A *f(%)*	SA *f(%)*	X2 P-value
1.	E-Learning is an efficient and cost-effective way of getting education.	10 (5.0%)	12 (6%)	15 (7.5%)	95 (47.5%)	68 (34%)	152.9 (0.000)
2.	The students of UOM have ready access to E-Learning from technology perspective.	1 (.5%)	7 (3.5%)	8 (4%)	143 (71.5%)	41 (20.5%)	171.5 (0.000)
3.	Internet is often avoided as it promotes social isolation.	3 (1.5%)	11 (5.5%)	22 (11%)	102 (51%)	62 (31%)	356.1 (0.000)
4.	Most of the students have awareness of the importance of e-learning	1 (.5%)	5 (2.5%)	18 (9%)	123 (61.5%)	53 (26.5%)	171.5 (0.000)
5.	Using of Internet makes the learning a fun.	1 (.5%)	6 (3%)	16 (8%)	117 (58.5%)	60 (30%)	239.5 (0.000)
6.	E-learning is effective in term of dealing missed lectures.	3 (1.5%)	4 (2%)	18 (9%)	111 (55.5%)	64 (32%)	219.1 (0.000)

7.	Students consider e-learning easier than hard form.	2 (1%)	7 (3.5%)	10 (5%)	113 (56.5%)	68 (34%)	238.6 (0.000)

Table No-2: To examine acceptance of e-learning and interest of students in computer at BS level

S.No	**Statements**	**SDA** *f(%)*	**DA** *f(%)*	**UD** *f (%)*	**A** *f(%)*	**SA** *f(%)*	**X2** **P-value**
1.	It is difficult to understand e-learning without the help of a teacher.	9 (4.5%)	19 (9.5%)	24 (12%)	111 (55.5%)	37 (18.5%)	167.7 (0.000)
2.	E-Learning is an efficient and cost effective way of getting education.	0 (0%)	4 (2%)	10 (5%)	121 (60.5%)	65 (32.5%)	179.6 (0.000)
3.	I have interest in the use of online library for self study.	3 (1.5%)	7 (3.5%)	15 (7.5%)	120 (60%)	55 (27%)	242.7 (0.000)
4.	Using e-learning is easily accessible to the students.	2 (1%)	7 (3.5%)	9 (4.5%)	140 (70%)	42 (21%)	337.4 (0.000)
5.	I would take interest to study courses which need Internet connection.	2 (1%)	6 (3%)	16 (8%)	130 (65%)	46 (23%)	282.8 (0.000)

Table-No: 3 To determine the usefulness of computer technology to students' and in relation the acceptance of e-learning at BS level.

S.No	**Statements**	**SDA**	**DA**	**UD**	**A**	**SA**	**X2** **P-value**
1.	Internet will increase productivity in course work and will help to reinforce student knowledge.	2 (1%)	9 (4.5%)	17 (8.5%)	101 (50.5%)	71 (35%)	190.400 (0.000)
2.	Internet saves time and efforts for both teachers and students.	0 (0%)	3 (1.5%)	8 (4%)	123 (61.5%)	66 (33%)	191.160 (0.000)
3.	Internet is effective for online presentation.	0 (0%)	2 (1%)	7 (3.5%)	122 (61%)	69 (34.5%)	193.960 (0.000)

4.	Internet increases the teaching quality and learning because it provide all types of media. (Print, audio, video and animation).	3 (1.5%)	10 (5%)	7 (3.5%)	134 (67%)	46 (23%)	305.750 (0.000)
5.	I use online library comfortably for self study.	1 (.5%)	3 (1.5%)	12 (6%)	127 (63.5%)	57 (28.5%)	288.300 (0.000)
6.	I feel confident in using computers.	3 (1.5%)	3 (1.5%)	12 (6%)	116 (58%)	66 (33%)	249.350 (0.000)

Table No-4: To determine it has ease for students to use computer in relation to the adoption of e-learning at BS level.

S.No	Statements	SDA	DA	UD	A	SA	X2 P-value
1.	It is easy to use the web for online educational resources and learning.	2 (1%)	6 (3%)	12 (6%)	127 (63.5%)	53 (26.5%)	278.050 (0.000)
2.	It is easy to learn how to use the Internet for reading lectures , accessing web notes and doing assignments.	0 (0%)	3 (1.5%)	10 (5%)	120 (60%)	67 (33.5%)	179.960 (0.000)
3.	The use of Internet is easier and better than using books/journals in the library.	1 (.5%)	8 (4%)	17 (8.5%)	117 (58.5%)	57 (23.5%)	232.300 (0.000)
4.	It is easy to become skillful at using Internet system.	1 (.5%)	5 (2.5%)	7 (3.5%0	141 (70.5%)	46 (23%)	351.800 (0.000)
5.	The internet connection is very fast.	11 (5.5%)	10 (5%)	14 (7%)	111 (55.5%)	54 (27%)	191.350 (0.000)
6.	Many ideas are available for convincing students through internet.	5 (2.5%)	7 (3.5%)	14 (7%)	118 (59%)	56 (28%)	233.250 (0.000)
7.	Students can be connected to share their ideas through internet.	1 (.5%)	3 (1.5%)	7 (3.5%)	124 (62%)	65 (32.5%)	291.500 (0.000)

Table-5: Regression Analysis.

Explanatory Constructs	R	R^2	F	P-Value
H_o2. There is no significant relationship between acceptance of e-learning and interest of students in computer at BS level in Malakand University.	.266	.071	15.071	0.000
H_o3. There is no significant relationship between usefulness of computer technology and students' acceptance of e-learning at BS level in Malakand University	.278	.077	16.533	0.000
H_o4. There is no significant relationship between ease of use of computer and relation the adaptation of e-learning and interest of students in computer at BS level in Malakand University.	.058	.003	.679	.411

Above Table shows multiple regressions analysis was performed for testing the series of hypotheses. For finding out whether there is a significant influence of the variable (acceptance of e-learning) on (interest of students), the findings indicate that the analysis is significant (***F*=15.071**), with **p=0.000**. The result also shows that the linear combination of two variables and having significant correlation coefficient (**R= 0.266**), which shows strong influence between variables; thus the model has significant influence. Moreover, **R^2=.**071. For finding out whether there is a significant influence of the variable (usefulness of computer), the findings indicate that the analysis is significant (***F*=**16.533), with **p=0.000**. The result also shows that the linear combination of two variables and having significant correlation coefficient (**R= 0**.278), which shows strong influence between variables; thus the model has significant influence, Moreover, **R^2 0**.077. For finding out whether there is a significant influence of the variable (ease of use of computer), the findings indicate that the analysis is significant (***F*=**.679), with **p=0.411**. The result also shows that the linear combination of two variables and having significant correlation coefficient (**R=0**.058), which shows strong influence between variables; thus the model has significant influence, Moreover, R^2 **0**.033.

$H_0$5. There is no comparison between the Electronic learning and Academic activities in Malakand University

Table-6: Comparison between the Electronic learning and Academic activities in Malakand University

Grade	N	Mean	St.D	T	P-Value
High	137	17.0912	1.26755	1.438	.622
Low	63	17.3635	1.19046		

The data presented in the Table above reveals total number of High-grade achiever and low-grade achievers with their Mean scores of 17.0912 and 17.3635respectively, and Standard Deviation of 1.26755 and 1.19046 respectively. The Levine's T-test model was used for the two groups of data i.e. High achievers' and low achievers and their no relationship between electronic learning and Academic activities in Malakand University. The result shows that the t-statistics value is 1.438, with P-value 0.622, is not significant at level of 0.05. Hence, the result showed there is no significant relationship between high achiever and low achiever.

To study student's attitude towards the acceptance of e-learning at BS level

- Item 1 shows that 47.5% of the respondent were agreed, 34% of the respondents were strongly agreed that E-Learning is an efficient and cost effective way of getting education. The **X2** value is 152.950 with significant value is 0.000 item 2 shows that 71.5% of the respondent were agreed, 20.5% of the respondents were strongly agreed that the students of UOM have ready access to E-Learning from technology perspective. The **X2** value is 171.5 with significant value is 0.000.
- Item 3 show that 51% of the respondent was agreed. 31% of the respondents were strongly agreed that Internet is often avoided as it promotes social isolation. 11% of the respondents were undecided, 5.5% were disagreed where as 1.5% of the respondents were strongly disagreed. The **X2**value is 356.1 with significant value is 0.000.
- Item 4 show that 61.5% of the respondent was agreed. 26.5% of the respondents were strongly agreed that Most of the students have awareness of the importance of e-learning. The **X2** value is 171.5 with significant value is 0.000.

- Item 5 show that 58.5% of the respondent was agreed. 30% of the respondents were strongly agreed that Using of Internet makes the learning a fun. The **X2** value is 239.5 with significant value is 0.000.
- Item 6 show that 55.5% of the respondent was agreed. 32% of the respondents were strongly agreed that E-learning is effective in term of dealing missed lectures. The chi-**X2** value is 219.1 with significant value is 0.000.
- Item 7 show that 56.5% of the respondent was agreed. 34% of the respondents were strongly agreed that Students consider e-learning easier than hard form. The **X2** value is 238.6with significant value is 0.000

To examine acceptance of e-learning and interest of students in computer at BS level

- Item 1 show that 55.5% of the respondents were agreed 18.5% of the respondents were strongly agreed that it is difficult to understand e-learning without the help of a teacher. The **X2** Value is 167.700 with significant value is 0.000
- Item 2 show that 60.5% of the respondents were agreed 32.5% of the respondents were strongly agreed that E-Learning is an efficient and cost effective way of getting education. The **X2** value is 179.6 with significant value is 0.000242.700
- Item 3 show that 60% of the respondents were agreed 27% of the respondents were strongly agreed that I have interest in the use of online library for self-study. The **X2** value is 242.7 with significant value is 0.000
- Item 4 shows that 70% of the respondents were agreed 21% of the respondents were strongly agreed that Using e-learning is easily accessible to the students. The **X2** value is 337.4with significant value is 0.000
- Item 5 shows that 65% of the respondents were agreed 23% of the respondents were strongly agreed that I would take interest to study courses which need Internet connection. The **X2**value is 282.8 with significant value is 0.000

To determine the usefulness of computer technology to students' and in relation the acceptance of e-learning at BS level.

- Item 1 shows that 55.5% of the respondents were agreed 35% of the respondents were strongly agreed that Internet will increase productivity in course work and will help to reinforce student knowledge. The **X2** value is 190.4 with significant value is 0.000.
- Item 2 shows that 61.5% of the respondents were agreed 33% of the respondents were strongly agreed that Internet saves time and efforts for both teachers and students. The **X2** value is 191.1 with significant value is 0.000
- Item 3 shows that 61% of the respondents were agreed 34.5% of the respondents were strongly agreed that Internet will enhance effectiveness to present written work in front of the class. The **X2** value is 193.9 with significant value is 0.000
- Item 4 shows that 67% of the respondents were agreed 23% of the respondents were strongly agreed that Internet increases the quality of teaching and learning because it integrates all types of media. (Print, audio, video and animation). The **X2** value is 305.7 with significant value is 0.000
- Item 5 shows that 63.5% of the respondents were agreed 28.5% of the respondents were strongly agreed that I use online library comfortably for self-study. The **X2** value is 288.3with significant value is 0.000.
- Item 6 shows that 58% of the respondents were agreed 33% of the respondents were strongly agreed that I feel confident in using computers. The **X2** value is 249.3 with significant value is 0.000

To determine it has ease for students to use computer in relation to the adoption of e-learning at BS level.

- Item 1 shows that 63.5% of the respondents were agreed 26.5% of the respondents were strongly agreed that It is easy to use the web for online educational resources and learning. The **X2** value is 278 with significant value is 0.000
- Item 2 shows that 60% of the respondents were agreed 33.5% of the respondents were strongly agreed that it is easy to learn how to use the Internet for reading lectures,

accessing web notes and doing assignments. The X2 value is 179.9 with significant value is 0.000

- Item 3 shows that 58.5% of the respondents were agreed 23.5% of the respondents were strongly agreed that the use of Internet is easier and better than using books/journals in the library. The X2 value is 232.3 with significant value is 0.000
- Item 4 shows that 70.5% of the respondents were agreed 23% of the respondents were strongly agreed that It is easy to become skillful at using Internet system. The X2 value is 351.8with significant value is 0.000
- Item 5 shows that 55.5% of the respondents were agreed 27% of the respondents were strongly agreed that the internet connection is very fast. The X2 value is 191.350with significant value is 0.000
- Item 6 shows that 59% of the respondents were agreed 28% of the respondents were strongly agreed that many ideas are available for convincing students through interne. The X2 value is 233.2 with significant value is 0.000
- Item 7 shows that 62% of the respondents were agreed 32.5% of the respondents were strongly agreed that Students can be connected to share their ideas through internet. The X2 value is 291.5with significant value is 0.000

Conclusion:

The main purpose of this research study was to analyze e-learning and its impact on BS level students'. We included four aspects in our analysis: students' interest in computer, usefulness of computer to students', ease of use of computer in relation to the adoption of e-learning and students' attitude towards the acceptance of e-learning at BS level. Results from the study revealed that there is no significant impact of students' attitude towards the acceptance of e-learning at BS level. This finding of the study is not in accordance with the finding of Wong & Teo (2009), who found out that perceived usefulness has a greater influence on behavioral intention (Intention to use) or interest. The results differenced may be due to the unfamiliarity of the students with this new emerging program. Similarly, the results also revealed that there is null acceptance of e-learning and interest of students in computer at BS level. This finding of the study is not in resemblance with the findings of the study conducted by Adewole-Odeshi, 2014; Ghani, 2011; Malhotra, 2004; Mehra & Omidian, (2011) who found

a significant relationship between usefulness of computer and the use of e-learning. The difference in results may be due to the facilities in the countries provided to the students.

Finally the results revealed that there is positive impact of usefulness of computer technology to students'. This finding is at variance with the findings of Adewole-Odeshi (2014) who noticed that the relationship among ease of use of computer and use of e-learning is significant in South-West Nigerian Universities, in the course work use of e-learning and computer is easy and very useful. The reasons of difference in results may be due to the availability and skills of compute facilities. In nutshell this study shows that some students still confuse to accept the e-learning, administration and selected authority trying to provides facilities of computer and e-learning at various levels. The BS level students in Malakand University shown different attitude and acceptance of e-learning, some of the respondents shown that it is not easy to understand and use e-learning program without having appropriate guidance, anyway some of the respondents show that in course work to get their needs from internet, e-learning is very useful. They show positive attitude and acceptance towards the usage of computer and e-learning.

Recommendations

On the basis of findings of this survey, the following recommendations were made:

E-learning in Curriculum: Competent authority and educationist who are participates in the making of policy they have need to makes e-learning a part of curriculum in various courses.

Provision of facilities: The Competent authority and universities provide computers lab in institutes, also provide sources internet like Wi-Fi etc. They should provide facilities to students for adoption of e-learning, and to teacher to share their knowledge with students.

Awareness Campaign: To aware students from the important of e-learning there is need of campaign to make to students able for the adoption of e-learning at all level of education and should be carried out especially now at university level for all study program.

Revision of Curriculum: To bring change in curriculum and revise the curriculum is equally recommended to comprise computer and e-learning program in teaching and learning.

Economical Internet facility for students: Provision of relatively stable power (electricity) supply, advanced and economical internet facility is recommended to stimulate interest of students or teachers who want to use e-learning.

Skillful Teachers: Teachers who are the implementer of the curriculum should be trained in the use of computer and e-learning facilities and for this purpose the government should have to organize workshops and seminars for teachers to equip them with the knowledge and use of computers in teaching and learning.

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