

Pandemic and Use of Modern Technologies in Education-Impact Analysis

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Abstract:-The article is based on the study of modern technology which plays an important role in educational development. During covid-19, all forms of different education have a tremendous effect on the development of education. In the given scenario, modern technology helps to influence the aspects of humans in handling suitable technology. The learning approach provides an opportunity to perform suitable functions to enhance the different abilities of the process. The integration of modern technology has analyzed the parameters during the pandemic for improving the strategy of education. In different approaches, the development of modern technology enhances the process of learning to obtain education more attractive. Communication technology is more important in today's situation to estimate different skills. Modern technology mainly focuses on educational development in the scenario of a pandemic. The educational institution simplifies the function of education in information analysis.

Keywords: Covid-19, Communication, educational development, modern technology, technology.

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INTRODUCTION

Modern technology mainly stands for information and communication technology to access the functionality of education. During the learning process, it is influenced to provide suitable opportunities for both students and teachers. The system of education estimates the development of modern technology for all the given aspects. The

pandemic has changed the lives of people in facilitating the needs of education. It is mainly used to handle the process of communication for learning purposes. The formulation of the given process evaluates the technique in association with different educational purposes. The opportunities of modern technology have adapted the innovation of information and communication in the covid-19 situation.

In the study, the different benefits and limitations of modern technology in educational development are also explained to integrate the communication purpose. The educational system addresses the execution in recognizing the purpose of communication to ensure the technology. There are different roles of modern technology that have been explained during the covid-19 scenario. The integration of modern technology has several key challenges in the field of educational development. The concepts of modern technology emphasize the use of information during the development of education. In the covid-19 situation, both students and teachers have an opportunity to reconstruct the field of education.

Study Aims and Objectives

The study aims to analyze the importance of using modern technologies in education in a covid (pandemic) scenario.

The Study Has The Following Objectives:

- To understand the importance of modern technology in education
- To analyze the significance of using modern technology in education in covid (pandemic) scenario
- To find out the challenges faced using modern technology in education
- To recommend solutions on how to overcome the challenges

Hypothesis

H1: The use of modern technology has a significant impact on education in a pandemic situation

H0: The use of modern technology does not have any significant impact on education in a pandemic situation

Literature Review

Importance of modern technology in educational development for educational purposes, modern technology i.e. information and communication technology plays a crucial role. According to [6], it acknowledges the content of education in the contribution of suitable use of technology. The need for information has wide use of modern technology in all the sectors of education. Modern technology mainly empowers the effectiveness of education in the contribution of the learning field. The significance of the process analyzes the importance of education which is a key to the learning outcomes. The fields such as communication among learners, educational administration,

informational system, technology communication, use of education, and various terms. The transparency between cultures of education has an important function during covid-19.

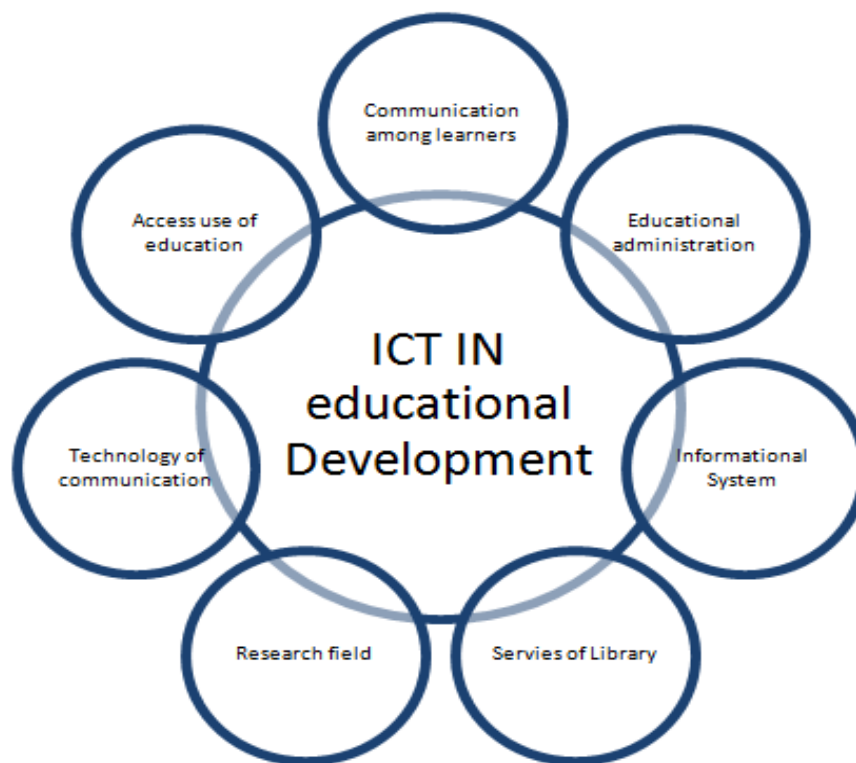


Figure 1: Modern technology in different fields of educational development
(Source: Saide and Sheng 2020, p.756)

The resources of modern technology provide an efficient process of learning in the field of different organizations. The competencies of education have required an important strategy in improving the level of education. The different consequences provide a platform to develop certain characteristics of communication and information technology. The basic building block of modern technology is used to facilitate access to education to contribute different mechanisms in both developed and developing countries. The educational sector has maintained the capability to criticize the development of education during the pandemic. It refers to the strategy of modern technology in representing the access use of technology is associated with different innovations. The enhancement of education has a wide meaning in terms of suitable fields of integration during the modern technology context. The educational process has developed the knowledge of students in the different contexts of the communication field [13].

The technological development of modern technology required suitable consequences in terms of the efficiency level of education. In the given diagram, modern technology has to play an important aspect in all the sectors of education. According to [9], in educational criteria, the applications of modern technology are used in the development of suitable educational sectors. The significant role of modern technology has anticipated the aspects of education in the increased knowledge of students. The sector of education is an important sector in the availability of modern technology to increase the performance of education. The educational activities provide prospects in the implementation of different fields of learning criteria. In education, the strategy of information

technology evaluates the context of the process for estimation. Nowadays, modern technology has been developed rapidly in the source of different enhancement of the process during the pandemic scenario.

BENEFITS OF MODERN TECHNOLOGY IN EDUCATION

The development of education has wide benefits in the approach of suitable functionality. [14], in a wide range of applications, the infrastructure of modern technology has revealed the studies based on different requirements. Modern technology is the best tool that helps to increase the use of education in terms of suitable functionality. The learning process of education is used to provide a convenient platform to share the information of education. It helps in promoting the principles of education to share the experience of the knowledge during the covid-19 pandemic. It helps in improving the retention of the education which is familiar with the learning ability of the students. [5], the organization and the community provide a benefit to innovate the teaching-learning process in the education sector. It has the power to create the concept of education in connection with different perspectives. There are different benefits of modern technology are used in the development of education.

There are different benefits of modern technology that are explained concerning the outcomes of a suitable context of education [7]. E-learning, promoting thinking skills, enhancement of learning criteria, and the capability of modern technology in collaboration with learning analysis such as

- E-learning criteria - The concept of modern technology allows the presence of education for both the teachers and the students. The process of online learning or E-learning ensures the ability of the student in terms of various concepts of opportunities. The strategy of education is used in providing the opportunity order to ensure a certain analysis of the process. Educational development has evaluated the aspects of different processes on the functionality of certain characteristics.
- Modern technology promotes higher-order skills of thinking- It is one of the most important skills used in promoting the analysis of the given process. It includes several skills such as reflection, evaluation, monitoring, and planning criteria. The use of education has justified the strategies of modern technology in various fields of information technology. It mainly focuses on the parameter of education on the analysis of suitable effects of modern technology capability.
- Enhancement of learning criteria- The concept of modern technology has developed the capability of education in the contexts of certain requirements. They need the education to enhance the use of modern technology in developing the functionality of learning outcomes. In the context of different factors of innovation, modern technology is used to support the curriculum of education to practice the estimation of the whole process.
- The capability of modern technology in learning analysis- Modern technology is used to integrate the economy of education to produce the suitable use of information. It plays a significant role in analyzing the context of development. The learning field of modern technology has led to the collaboration of different creative and complex thinking.

In the given graph, the percentage of enhancement and learning benefits of modern technology are given to recognize the use of resources. In the prospective year i.e. in 2020 and 2021, the level of modern technology has

changed in different phases. According to [4], it enhances the strategy of learning to motivate the use of education in different sectors. It mainly motivates the skills in the outcomes of informal learning.

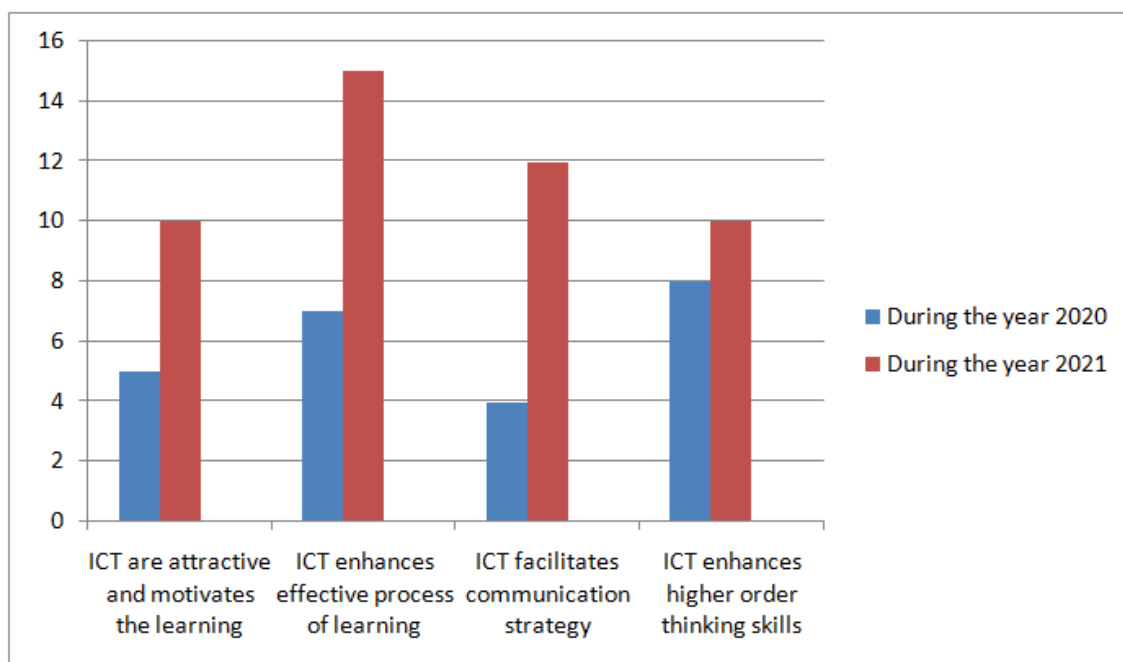


Figure 2. Percentage of learning benefits of modern technology in educational development
(Source: Akram et al. 2020, p.427)

ROLE OF MODERN TECHNOLOGY DURING COVID-19

During the scenario of Covid-19, modern technology focuses on the use of education which is an outgoing analysis. According to [8], the Covid-19 is a transnational disease that has estimated the global changes in the information of development. Educational development provides a network to manage the order of different opportunities. The definition of modern technology estimates the factor beyond the strategy of development in educational criteria. For maintaining social order during a pandemic, modern technology is the best way to enhance the use of collaboration in different forms. It is the tool that is used to accomplish the context of education on the aspects of different abilities. Modern technology mainly allows supporting the needs of the information in perspectives of different analyses.

Modern technology helps to analyze the importance of education to synthesize the functions of educational development. [3] Stated that, as the result of the covid-19 crisis, the platforms of education estimate the overall number for providing support to the available resources. The information and the communication technology can develop the adaption for development purposes. The innovation of learning generates the practices in the level of education. Many teaching-learning processes require different resources on the need of different resources of development. The given study focuses on the process of learning to provide an experience due to the covid-19. In the education field, the role of teaching and learning has a vital impact on the approach of different methods. During the pandemic, there is a different collaboration on the development of modern technology skills [10]. The teacher and the student develop a technique to realize the use of modern technology. The global health crisis focuses on the use of education to relate the characteristics of the process. Modern technology plays a crucial role

based on different use of resources [11]. The systematic dimensions of the process define the transmission of knowledge on the system of different educational purposes. In this way, information and communication technology plays a role during the situation of covid-19. The increased use of technology generates the framework in terms of different tools of the system. The opportunities of modern technology have a perception to rationalize the context of the process in different factors of integration.

LIMITATIONS OF MODERN TECHNOLOGY USE IN THE DEVELOPMENT OF EDUCATION

In educational development, there are different limitations of modern technology which helps to simplify the description of the technology. [12], the limitations are mainly related in terms of student perspectives, teacher perspectives, and the perspectives related to the technology. The use of education mainly develops the personality of modern technology to the students. Students have less time for study rather than that of technology development. The concept of learning reduces the impact on the availability of suitable approaches. There are various aspects of the process to identify the limitations of modern technology in education. Following are the limitations of modern technology in the use of education such as:

- Thinking and analytical skills limit the functionality of the students on the information of outcomes.
- The excess use of modern technology is difficult for weak students to learn the concepts in the development of education.
- The maintenance of different technology has facilitated the analysis of the given process to empower the use of education.
- The functions of different resources have affected education in developing the different information.

In the given table below, the several disadvantages of the information and communication technology are explained

Table 2:

SI NO	Limitations of modern technology	Usage of modern technology in educational development
1	Active learning	Long term archive of data
2	Collaborative learning	Higher accuracy of the process
3	Creative learning	Less requirement of the facility
4	Integrative learning	Comparison of education among different levels of choices
5	Evaluative learning	Effective use of the process to compare the overall procedures.

Modern technology acquires different limitations based on several requirements of usage. It describes the analysis of information on contrasting the situation of the process. The learning ability of modern technology promotes the functions of education by creating awareness [2]. The information is manipulated to promote a suitable approach to teaching and learning capability. It elaborates the presence of different learning by playing the role of

modern technology. Different limitations require different levels of choices in the field of teaching and learning criteria. The field of education helps to develop the different functions on the practices of overall changes [1].

Table 2: Engagement frequency of students in educational activities using technologies and without technologies

Testing of proposed hypothesis for its validness

Engagement frequency in education	Using technologies	Without technologies
Daily	60%	50%
3-4 times a week	25%	33%
Once a week	10%	12%
Rarely or never	5%	4%

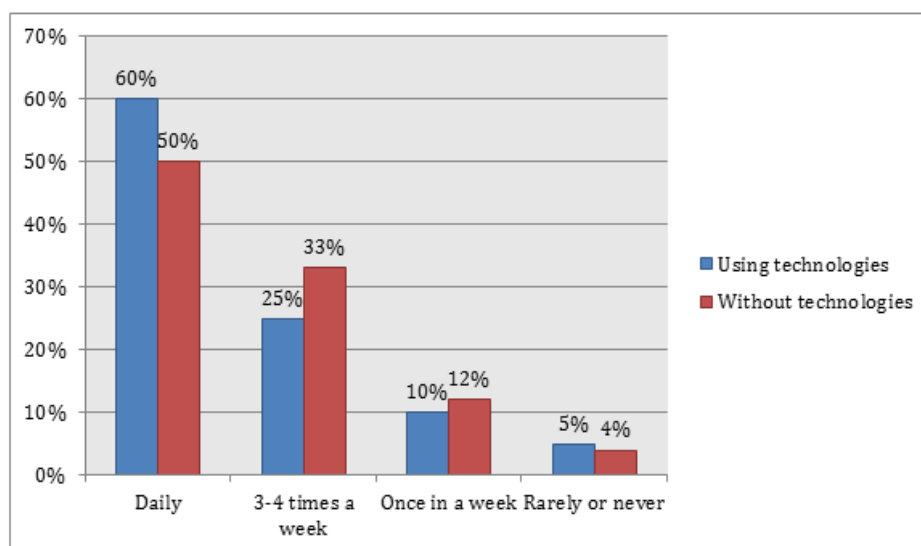


Figure 3: Engagement frequency of students in educational activities using technologies and without technologies (Source: Created by Author)

Table 3: Impact of online education of students (Source: Created by Author)

Serial Number	Factors	Average score
1.	Online interaction with students and teacher	9.0
2.	Restraint and Focus	8.1
3.	Submission of assignment on time	8.5
4.	Feedback for result or performance	9.3
5.	Expression clarity	8.4
6.	Quality teaching environment	9.6
7.	Doubt clearing	9.2

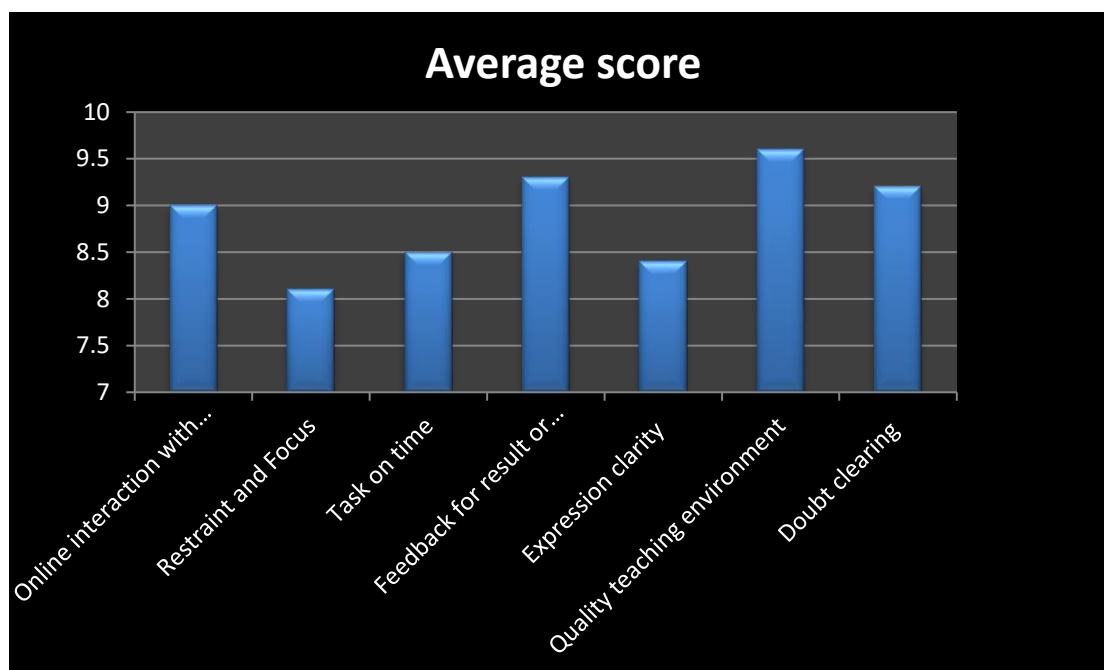


Figure 4: Impact of online education of students (Source: Created by Author)

Table 4: Impact of modern technologies used in education during the pandemic (Source: Created by Author)

Serial Number	Technical tools for education	Motive	Subjects	Frequency (in %)
1.	Google Classroom	Exercise assessment	Multiple	46.3%
2.	MS office	Assignments	Multiple	30.5%
3.	Smart School	Exercises, learning contents	Multiple	48.4%
4.	Widgets for digital book	Exercise practices	Geometry	4.6%
5.	Polpo	Exercise practices	Mathematics	8.9%
6.	Google forms	Testing, examination, quizzes	Multiple	45.5%

KEY CHALLENGES OF MODERN TECHNOLOGY INTEGRATION IN EDUCATIONAL DEVELOPMENT

Several challenges are faced on integrating the concept of modern technology based on planning and learning ability. In the educational field of development, the levels of the process facilitate the concepts of modern technology on the strategy of given perspectives. The integration of modern technology develops the guidelines to determine the strategy of the process [15]. The practices and the arrangements of the education identify the use of modern technology to provide an important enhancement of the resources. Different key challenges are used in integrating modern technology in the education field such as:

Environmental challenges

The use of modern technology has a significant function in the strategy of suitable fields of education. The environmental challenges provide a wide description of the process to determine the integrity. The ability of

modern technology enables the use of resources in terms of certain characteristics of the process. It ensures the technology to determine the possibility to estimate the overall use of the resources. The mechanism of modern technology requires a function to manage the criteria of education.

Cultural challenges

The second key challenge of modern technology integration in educational development is cultural challenges to represent the proportion of the education system. It exhibits the analysis of the process which helps to determine the concept of teaching-learning criteria. It shifts the functionality of education in the context of certain abilities of the key challenge. The infrastructure of information highlights the estimation of the process in the field of a particular requirement.

Educational Challenges

The third challenge in modern technology integration is one of the greatest challenges which helps to integrate the goals and the responsibility of the educational system. The interaction between students and the teachers is considered to be the most important function to require suitable aspects of support. This key challenge manipulates the analysis to require different perspectives.

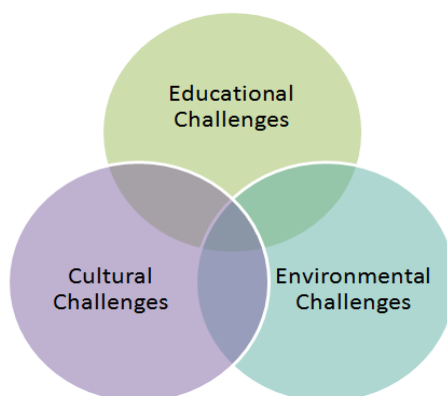


Figure 5: Different Challenges of modern technology integration in educational development
(Source: Visvizi et al. 2017,p.673)

The transformation process provides an opportunity related to the practices of education to develop the factor of personality. [15] stated that modern technology describes the functionality of other technology that provides suitable information to recognize the analysis of the process. The area of curriculum and assessment involves the conceptual knowledge related to the process of different factors that determine the analysis related to the educational practices in the research context. This model describes the functions of research and the evaluation to gather the collection based on the systematic analysis of the process. In the education context, the personal development criteria require different skills related to the addition of the process which is generally used for communication purposes. It describes an effective analysis of the process related to the approach of professional development functions. It is a fundamental right that helps to create different policies that are used in the transformation of education.

Technology acceptance model

This model is used to access the process of information and communication technology in suitable ways. It plays an important function to perform the concept of communication and technology based on the function of perceived usefulness and behavioral intention. It claims certain characteristics based on the interaction of interfaces used in modern technical analysis. It collects the different data which are used in the estimation of the process to accompany the factor of encouragement which aims to provide a suitable contribution in the research of modern technology in higher education. The definition of perceived usefulness is used to establish the perspectives of the technology to estimate the factor of external variables such as features of the system, criteria of training documentation. The particular system is used to the extent of perceived use to analyze the effort of estimation. It performs a specific function to enhance the concept of information and communication technology ([11]).

It is widely applied in the strategy of technology related to the functions of suitable acceptance of the model which require the complete acceleration to improve the performance based on different effects related to the use of suitable factors of evaluation.[7], the given model integrates the hypothesis to determine the influence of modern technology which provides a proper significance. It is applicable in the identification of the models to influence the strategy of the model based on the factor of contribution. It defines the attributes which are established mainly to enhance the functionality of the model. The performance of the given models helps to measure the strength of intention in the context of actual use which is tested to influence the applications. The process of communication helps in identifying the development of technology for higher education purposes.

Information and communication technology (ICT) plays an important role in higher education papers. Modern technology helps in the improvements in the social and economic sector and increases the standards of the person. The students can benefit from modern technology as it creates various opportunities for colleges and universities to achieve diverse knowledge of contents effectively. In the higher education paper, modern technology will help by providing different learning styles and learning abilities in a diverse form. Involvement in the various online activities will develop collaborative skills among the students. The students in higher education who are struggling or disabled can easily get knowledge through information and communication technology. In the survey, 359 people participated to access the importance of information and communication technology for the higher education paper. The participants were teachers, students, faculty, and staff. Among all participants, 55 percent of participants strongly agree with the importance of modern technology for higher education.

They agreed to learn modern technology in colleges as well as universities. They support the online learning management system. The majority of the people agreed that social media can provide more benefits in exploring learning and academic skills. In the result, it is found the majority of the students have developed better knowledge retention.

It has been found that modern technology helps in saving time as the students can start their training from any place and also they can access the training system any time whenever they time which is more convenient and less time consuming for them. According to Park and Heo (2020), students get opportunities to access their higher education through modern technology in every situation. The majority of the participants agree that modern technology reduces anxiety among the students and increases learning satisfaction among the students. In the table, it is found that the majority of the students (53.2% n=46) are agreed with the higher importance of the information and communication technology in the higher education paper. They support the currently available research capabilities of the higher education paper. They support the development of the currently available tools for

tracking progress and research proposals. The questions were asked to the participants in the research about the importance of modern technology in their higher education paper. The majority of the students (42% n=36) were in the favor of modern technology for developing their knowledge and enhancing their skills and interest.

The majority of the participants agreed with the benefits of modern technology in the higher education paper. In the research, it is found that the majority of the students face various problems while using modern technology such as the speed of their computer, problems in accessing the internet, printer issues as well as computer backup procedures. These all were of high importance to the students and these problems became a hindrance to the effective use of modern technology for the higher education paper. [13], modern technology supports the technologies used in the higher education paper which was majorly supported by the participants. Modern technology support needs in the electronic testing environments and timely maintenance for enabling the teachers to perform their tasks.

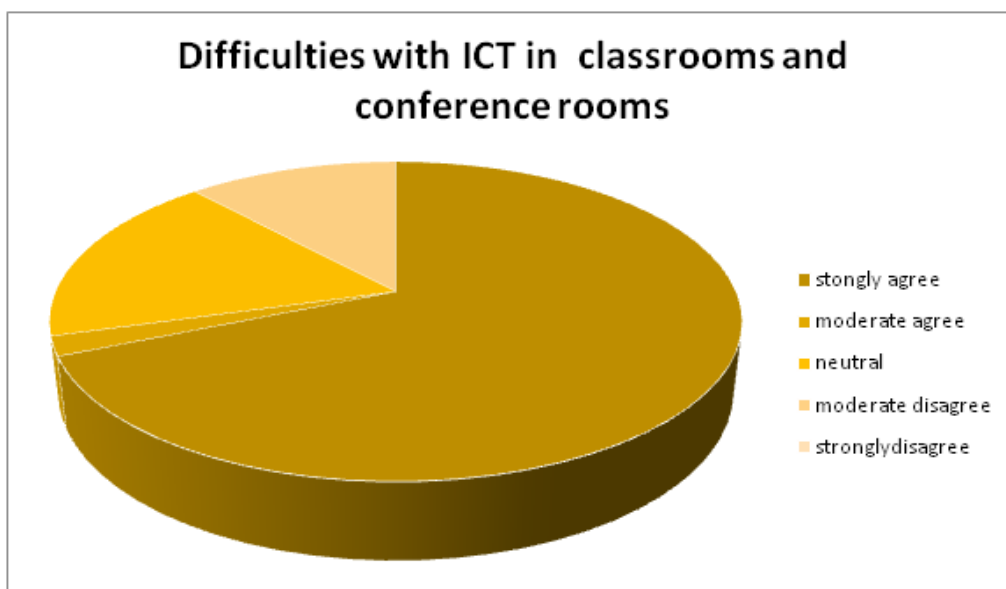


Figure 6: Difficulties with modern technology in classrooms and conference rooms
(Source: Ningrum et al. 2020, p.767)

The result of the study shows that modern technology has major advantages in higher education papers. In the result, it is found that the modern technology strategies should be examined in the consideration of the research capabilities of the higher education paper and the available learning tools should be developed for the track progress and for developing the research proposals. The students have supported the research activities through modern technology and the faculty and staff also agree with the benefits of modern technology for the paper. The students were supporting modern technology as it is less consuming time as well as they can start their training from anywhere and anytime they want. Modern technology creates interest among the students as it provides a diverse knowledge of the topics. The Blackboard system was supported by the majority of the students which signifies that more training is needed for learning the system and internet properly.

Digital audio and graphic design are not much used and their importance is still not known by the students. As the result, various problems are found regarding modern technology such as the speed of the computer and the problem in accessing the internet. modern technology personnel gives priority to the maintenance of the

conference room and the classrooms. Social media has a major impact on the learning skills of the students as it provides a larger explorer in the form of diverse courses in different learning styles which has highly influenced the students. Modern technology has the potential to increase access in the training of the students. This potential will include the challenges, needs, and modern technology limitations in the higher education paper. The limitations of modern technology are they have poor data control as well as mechanism and incompatible software and the inappropriate design of the software creates problems in understanding the importance of modern technology. The majority of the participants were in the favour of blackboard study as they are more comfortable with the blackboard training which shows that there is a need to provide training for the proper use of the system. Students liked the modern technology as a large volume of data they can store which would help them in learning the topics.

Table 5: Importance of modern technology for the higher education paper

Online survey assessments	38.9%(n=32)	39.4%(n=29)	15.9%(n=13)
View all the online active projects in the higher education paper	53..2%(n=46)	23.6%(n=20)	15.6%(n=13)
Research capabilities like electronic data for capturing the research data	42%(n=36)	28.2%(n=24)	21.2%(n=18)
Research capabilities for developing the research proposal for the higher education paper.	43.2%(n=37)	33.8%(n=29)	15.6%(n=13)

CONCLUSIONS

From the above study of the article, we can conclude that information and communication technology has an important role in educational development. There are several processes used in the estimation of teaching and learning criteria. The mechanisms of education help in increasing the access use of education for the effectiveness of given factors. Different specific roles are used to analyze the practices of education during development. The collaboration of the given outcomes is used to synthesize the perspectives of the process. The conclusion of the study affects the factor of cost-effectiveness in promoting several challenges and benefits of modern technology. The concept of the teaching and learning process provides a crucial concept of education during a covid-19 pandemic. The outcomes of the process are mainly used in the development of education.

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