

Availability and Effectiveness of Information Technology Infrastructure in RYK Secondary Schools

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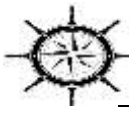
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Abstract

This educational study determines the availability and effectiveness of IT (Information Technology) infrastructure in RYK Secondary Schools. In this article, challenges faced by teachers and students in the usage of IT will be discussed, as well as the use of IT infrastructure in education and its accessibility and efficacy in teaching and learning are addressed. This study will be beneficial for the teachers and higher authorities in understanding the availability of IT infrastructure in Secondary Schools. All the students (girls and boys) from the Public Secondary Schools of RYK were considered as the population. The descriptive survey design and random sampling technique were employed to accomplish the goal. A 50-item self-structured questionnaire based on a 5-point Likert scale was utilized to collect the data from a sample of study i.e. 500 male and female students. The collected data were analyzed by using SPSS with descriptive statistics (mean, percentage, and frequency value). The findings are intended to support the hypothesis that teachers and students face significant challenges in RYK Secondary Schools due to the lack of facilities. Therefore, it is necessary to work for improvement so that the students can learn in a better way. To conclude, using technology effectively in the teaching-learning process, improving the quality and accessibility of technology, and motivating the learning environment plays a vital role in education. As a result, with the use of IT, slow learners might also take an active role, and students' attitudes can be positively affected, and learning can be enhanced.

Keywords: Information Technology, Availability, Effectiveness, Education, Secondary Schools



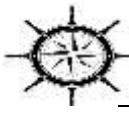
Introduction

Information technologies are now prevalent in many facets of life. Yet as society quickly transitions to digital media and information, the relevance of IT in education is also going to increase throughout the twenty-first century. This report presented a review of the research on the use of IT infrastructure in education and its accessibility and efficacy. It aims to determine how IT and student learning are related, paying special attention to the accessibility, efficiency, and infrastructure of IT resources in education.

Information is knowledge about someone or something that is about facts and details of the subject. It may be a form of data on paper or digital data. A process of making knowledge accessible to another individual, institution, or society is information. Information is the transmission and transfer of knowledge in its many forms, facts, and concepts. *Technology* is how we transfer or communicate information. Technology is the application of scientific knowledge to real-world problems or purposes. With the application of scientific concepts, technology alters the environment in which humans live. Technology may be used to develop other human inventions like industry using scientific concepts. Difficulties arise as a result of technological advancement; but, ingenuity and innovation also develop in environments of conflict and strife. This environment gives rise to technology, which is the invention of items that address issues and improve the human experience (Mladenovi et al., 2019).

Information technology is the practice of using computers and software to handle information, including corporate data, digital photos and videos, voice communications, multimedia presentations, and other electronic files. It involves using computer systems and applications to store, process, design, send, and retrieve information. The hardware, software, network resources, and services needed to set up, administer, and govern a corporate IT system are referred to as the "*IT infrastructure*". IT infrastructure provides valuable planning, policies, construction, design, and operations.

Information Technology is not only an important part of our daily lives, but it can also improve education at all levels. As a result, IT integration is crucial to the development of teachers, and teacher training programs that use IT which increase the caliber of instruction. In many European countries, it is trusted to teach students Computer Science or knowledge that supports the integration of IT in courses and to advance effective teaching about IT (Buabeng-Andoh, 2012). However, as the value of utilizing IT in education becomes more



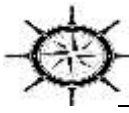
widely recognized, the developing world is likewise becoming more and more interested in the positive effects of using IT on students' academic attainment.

Numerous studies demonstrate the non-existent usage of IT in education, and Pakistan is not far behind in the quest to become the first country in the world to be technologically self-sufficient. IT plays an important role in entertainment, business, and the workplace.

Workplace circumstances, how knowledge is handled and shared, how it is taught, and how it is learned. It is crucial for instructors to do their part in creating a positive learning environment. IT is crucial to the teaching and learning processes. An instructor by using IT aids communicates successfully and clearly with students. Internet and multimedia are used for effective training, teaching, and learning. Its use is more engaging and beneficial nowadays for the propagation of knowledge and outcomes. The first level of reaction, which refers to learning at this level, assesses how well trainees react to the training program. Did you find it enjoyable? Try to answer participants' inquiries regarding their opinions. Was the tale connected to what they did? Additionally, participant's reactions have meaningful learning outcomes (second level); although positive responses do not promise to learn negative reactions are likely to reduce your chances (Paling & Martin, 2011).

Lesson preparation cannot be done by the students in a regular classroom. IT, however, enables students to take charge of their educational experience. When class is in session and how the course material is delivered are decisions that the students make. Every element of life now uses information and communication technologies. The internet, emails, laptops, and mobile devices have all become indispensable tools in modern civilization. The use of IT has made it possible for individuals to engage and communicate effectively. The reduction of linguistic barriers has been aided by IT. Emails, instant messaging, mobile phones, iPhones, and social networking sites like Facebook and Twitter are some of the more well-known IT products. Many people in society are unable to benefit from the technology that is already accessible. Poverty, remoteness, lack of access to technology, and other factors are among the causes (Fu et al., 2013).

Students must be given the skills they need to succeed in a world that values technology, according to educators. For pupils to realize their full potential and fulfill the learning objectives, technology must be used correctly. Technology may help to learn in a variety of ways, according to a study in education. For instance, utilizing technology in the classroom may inspire students. Digital media, computers, and other computer-related technology help



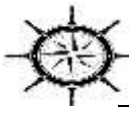
hold students' interest and boost performance. Additionally, computers can offer a variety of exceptional, efficient, and potent alternatives for teaching and learning. The practice of skill-building techniques, problem-solving in the actual world, interactive learning, and exploration learning are some of these changes. When properly incorporated into a classroom environment, ITs provide both students and instructors with a number of benefits (Ratheeswari, 2018).

The use of IT as a learning tool gives pupils the chance to deepen their understanding of other curricular disciplines. IT may be used to provide education to everyone, everywhere, and it can also assist students in developing 21st century skills. ITs are being used in the teaching and learning processes at several institutions across the world. Traditional curricula have been replaced by technology-based curricula in developed countries. The Sindh University Journal of Education (Vol. 44 No. 2, 2015) in their teacher education institutions where teacher educators are given full support to incorporate technology into their typical teaching practices and they are able to produce better task forces that effectively use IT tools in their teaching-learning process (Villegas-Ch, Jácome-Vásconez et al., 2022).

To conclude, Information Technology is presenting a significant role for many years in every aspect of life. It is playing a leading role in education, business, workplace, and Entertainment. IT changes in working conditions, handling and exchanging knowledge, teaching methods, and learning methods. It is most important for teachers in their role for a good teaching environment and teaching-learning process. It helps teachers for teaching effectively and understandably to the learners.

Statement of the Problem

Information Technology is a common component of daily life in today's era and is crucial to education. In our culture today, when knowledge is growing so quickly, the use of information technology is required; teaching is one of the most difficult careers. Within a short time, IT has emerged as one of the fundamental pillars of contemporary civilization. Understanding IT and mastering its fundamental ideas are now seen in many nations as being essential components of education. In IT, most teachers are self-taught. Many European nations place a high value on teaching computer science and information technology to students, supporting the integration of IT into academic disciplines, and encouraging good IT-based education. So, there is a need to use information technology in every field of life,



particularly in the educational field. For this purpose, the research is conducted to investigate the availability and efficacy of IT in education or teaching-learning, and which type of challenges is faced by teachers and students. As there is a lack of IT infrastructure in Public Schools, teachers are not well-trained and students don't have enough facilities. The purpose of this study is to aid in accessing the information technology infrastructure in secondary schools. So, the challenges can decrease by higher authorities and teachers by providing facilities and training to the mentors and disciples for the improvement and development in the education field concerning IT.

Significance of the Study

In this study, we investigate the availability and effectiveness of Information Technology infrastructure in RYK Secondary schools. The research is seen as the first step in a series of studies designed to identify the availability of Information Technology Infrastructure at the Secondary School level. In this study, we can know how far students understand information technology. Computers and computer devices play a very important role in educational institutes, homes, and workplaces. This study will also be helpful for educational leaders, managers, and educational policymakers in understanding the role of IT at the Secondary level. This research may also benefit the students and teachers.

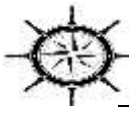
Research Objectives

1. To identify the availability of Information Technology Infrastructure in Public Schools at the Secondary level.
2. To investigate how Information Technology improves teaching and learning.
3. To analyze the different causes/impacts of Information Technology.
4. To investigate the advantages and disadvantages of using Information Technology.
5. To evaluate how students use Information Technology in the classroom and at home.

Hypothesis

The study is guided by the following hypothesis:

- The use of Information Technology plays a very important role in higher education institutes.

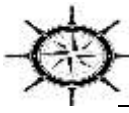


- The availability of IT (Information Technology) has an effect on students' learning in Rahim Yar Khan Secondary Schools.
- Accessibility of IT resources affects students' learning in Rahim Yar Khan Secondary Schools.
- User-ability of Information Technology resources affects students' learning in Rahim Yar Khan Secondary Schools.

Literature Review

The term “*Information Technology*” refers to the fusion of communication technology and information technology. It refers to all forms of technology that are used to produce, access, and alter data. Information and communications technology (IT) is a widely used component of daily life and is essential to the educational process. The evaluation's goals were to determine how much technology was utilized in schools at both levels and, more importantly, to evaluate how it affected teaching and learning, particularly how it is used to support kids with special educational needs. The thoughts of educators, including administrators and teachers, on the effect and potential future use of technology in education. IT is presently permeating many facets of our lives. IT enables a teacher to offer his lessons and enables students at any educational program level to study.

Several high Schools provide initiatives that let students borrow the most recent devices the institution can afford, such as computers, laptops, and other technology. Christopher Sholes' invention of the first typewriter with a QWERTY keyboard in 1868 made it possible for pupils to learn how to write twice as many words in half the time owing to the advent of shorthand programs in Schools. When personal computers were initially introduced to classrooms in 1977, just 18% of US public Schools had a single computer for instruction. By 1991, computers were present in every school, with one computer per every 18 students. This trend continued until the year 2000 when there were five computers per class. Adding Technology cannot function without education since it is only through education that individuals learn about the new technologies that the majority of people use today. Yet, using technology in education alone will never have a transformational effect. It needs support from instructors who utilize technology in projects that encourage active learning, relate it to students' learning objectives, and incorporate it into the curriculum. The bulk of our information nowadays is consumed by technology, but that doesn't imply we must always rely on it. By recalling old lessons and understanding that technology will someday disappear

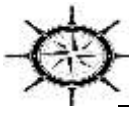


in the same manner that it had appeared, people may become more prepared lengthening the time it takes to get respondents (Wang et al., 2014).

The research already in existence that was looked at in this article revealed a link between teachers' usage of technology in the classroom and their unique personality traits. Different teachers have different IT capabilities, sometimes known as a knowledge and skill gap. With the use of learning tools, the students feel comfortable. Many students give the favor of teaching through the technological resources, that technology gives understandable learning. But, it is not yet clear whether students are using these resources appropriately. Decide if the reason for avoiding its use is invisible or something else and how to deal with it. Without research, it is difficult to know whether universities are effectively meeting the needs of students (Ben Youssef and Dahmani, 2010).

Both instructors and students are increasingly utilizing a more advanced sort of technology in the classroom. Google Docs is a fantastic example of this type of cloud-based technology. According to Zheng et al. (2015), the student's usage of Google Docs facilitated tasks like group writing and editing and enhanced relationships between authors and readers. The motivation and involvement of students in classroom lessons have been observed to increase when using game-based apps. According to Yang, Li et al. (2015), game-based Programs like Kahoot provided pupils with engaging learning opportunities. Their motivation, involvement, and learning are increased. A large portion of the kids have access to mobile devices, desktop computers, and the Internet. Computers are most commonly used to write and edit text, play music, and create multimedia presentations. Making calls, sending messages, and taking photographs or videos with a mobile phone are just a few of the many common applications for them. Email transmission and reception are the three most common uses of web-based technologies. The participants were less likely to use their phones and laptops simultaneously.

Research has shown that IT strategy has an effect on business performance, including the influence on cost reduction and revenue growth, but this emphasis on performance also depends on the amount of investment made by the organization (Al-Rasheedi et al., 2018). In addition to having a direct influence on performance, innovation may be a barrier between IT infrastructure and business performance. This might happen as a result of possible innovation brought on by improved IT infrastructure. With this invention, the company may potentially

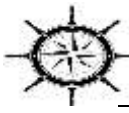


boost productivity and competition. The results of a study that said innovation is a set of abilities intermediate between IT and performance support this (Stasytyt & Pilionien, 2016).

The capacity of a business to locate, deploy, develop, and reconfigure IT resources in instruction to gain a competitive edge is known as IT capability. The company's performance level will be impacted by this IT competency level. It is in line with study findings by Josef Ruiz et al. that individual and organizational learning, as well as collaborative IT, have positive and noteworthy benefits on business success, which found that IT competency significantly affects business performance over the long and short terms (Nemes et al., 2022). The humanist approach to knowledge management and innovation performance, according to Jabbouri et al. (2016), is significant and favorably correlated with both. The majority of the existing literature and the associated research, however, has concentrated on the first two domains of innovation, namely: product and process innovations. A *product innovation* is the creation and commercialization of a completely new good or service, whereas a *process innovation* is the modification of a good or service's manufacturing procedure via the use of new technologies (Inauen & Schenker-Wicki, 2011).

The research's internal factors have a significant impact on how instructors use technology in the classroom. But which factor has the biggest influence on IT use, and how internal factors are impacted by IT preparation initiatives, are covered in the sections following. A mixed-methods study was undertaken by (Southmayd, 2022) to determine if instructors who regularly incorporate technology and work in technologically advanced classrooms have attitudes and behavior that are consistent with a student-centered paradigm. The finding adds to the body of research on the impact of teachers' attitudes. Furthermore, certain newly hired instructors were more capable and enthusiastic about utilizing computers in actual classrooms. The effectiveness of integrating technology in the classroom may be partially explained by internal factors. Accordingly, the authors argued that teachers with IT skills should not only be taught how to utilize hardware and software but also how to use computers in their teaching techniques and activities.

The usage of IT in the classroom was better understood by the teachers. Teachers' views of the function of technology have evolved, despite the fact that they still had to deal with other challenges including classroom management, professional support, and technological availability, accessibility, and availability. They were more inclined to acknowledge the value of technology in education and to think that it can help to learn.



Advantages of IT

When properly incorporated into a school environment, IT offers several benefits to both instructors and students. The following are a few noteworthy benefits:

- Enhanced access to resources
- Experiences that are interactive for learning
- Student-centered Learning

Disadvantages of IT

IT can improve education in many ways. IT deployment at schools and colleges throughout the world does have certain drawbacks, though. Some significant drawbacks include the following:

- High Costs
- Teacher training
- Uncertain Success Rates

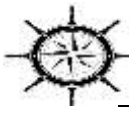
Why use Computer Technology in Education?

Every element of life now incorporates technology and digital media. Students must be given the skills they need to succeed in a world that values technology, according to educators. For pupils to realize their full potential and fulfill the learning objectives, technology must be used correctly. Technology may help learning in a variety of ways, according to a study in education. For instance, utilizing technology in the classroom may inspire students.

Computers, digital media, and other technology connected to computers can attract students' interest and enhance their knowledge.

Uses of IT in Education

IT is used in education in more ways than just providing computers and Internet access in the classroom. IT may be used in schools and universities in a variety of ways to improve students' overall learning experiences. The challenges that instructors can face while using IT were the subject of some studies. They showed that the barriers to using IT in the classroom are due to teachers' limited understanding of the available technologies and how to integrate them into the teaching and learning process. In order to assist them in delivering the curriculum, instructors need also be knowledgeable about how to use IT in pertinent ways



(Morrison, 2011). It is essential that instructors have self-assurance in their abilities as a way to address this issue.

Opportunities

IT can fulfill the following three objectives in Education:

- Increase Networking Opportunities

IT can be used to connect school to other schools. For students in poor nations and in rural regions, networking skills are extremely crucial.

- Provide online learning

With the aid of ICT, education has transitioned to the Internet. As a result, correspondence schools have been replaced by online and remote learning.

- Complement traditional education

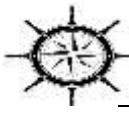
Students have benefited from ICT in conventional schooling as well. To produce assignments and other materials, students utilize software tools like Microsoft Word.

Internet

Millions of computers are connected by the Internet, the largest computer network in the world. Information may be sent between computers linked to the internet. The many telecommunications links connecting these computers include:

- Four lines
- Fiber optics line
- State lights and wireless connections

Information kept on computers referred to as hosts or servers can be found through the internet. For communication, these computers use the TCP/IP protocol, which is widely used. Transmission Control Protocol/Internet Protocol is what these terms stand for. Anyone who has an internet connection may access the internet for information. Millions of people have access to the internet, and they use it to interact with their family and friends, play games, and acquire information. Many businesses advertise and sell their items online. Through technology, students may access instructional materials at any time and from any location. The resources are now more widely available, which is excellent for the pupils. Students with special needs, those attending Schools in underdeveloped nations, or those who live in rural regions would benefit the most from it. A lot of professors deliver lectures to their pupils to



impart knowledge. With the use of IT, students may acquire knowledge via podcasts, videos, and other interactive media. The pupils get a better learning experience as a result (Sundram, Bahrin, et al. 2018).

The Internet can assist with conventional teaching techniques. Teachers could instruct their pupils to look up specific websites to learn more about a particular subject, for instance. He could also suggest that students look for information on services provided at certain locations online. Students could also be instructed to conduct an internet search to learn more about various communities, ethnic groups, etc.

Internet-based lectures can take the role of conventional classroom lectures. Many courses are now being created that will be provided in whole or in part online. Course materials can be posted online by the instructor. Additionally, he has the option of filming the lesson for online consumption. Information technology (IT) in education is a teaching and learning approach that supports and improves information delivery via the use of information and communication technologies. International studies have demonstrated that IT may improve teaching techniques and student learning.

Advantages of Internet

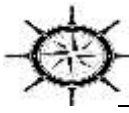
- | | | |
|--------------------------|-----------------------------|--------------------------|
| • Search for information | • Internet-based learning | • Online search |
| • E-mail | • Research | • Medical |
| • E-commerce | • Advertisement | • Globalization |
| • Quick communication | • Using video conferencing | • Information flow |
| • Discussion Board | • News | • Improved comprehension |
| • Job hunting | • Publisher of encyclopedia | • Life's comfort |
| • Entertainment | | |

Limitations of the Internet:

Here are a few significant drawbacks of the Internet:

- | | |
|------------------------|-----------------|
| • Hacking | • Viruses |
| • Immorality | • Time Wastage |
| • Issues with security | • Digital Crime |

Various Devices in IT:



- Use of distant devices to access course materials.
- Lectures, readings, and a digital library are all available online.
- Academic management systems utilizing the cloud or the internet.
- Applying the idea of the flipped classroom.
- Using technologies like projectors, audio players, and mobile or tablet computers.

National Award for Teachers Using IT for Innovation in Education

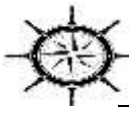
The National Award for Creative IT Utilize was created by the government to encourage teachers and educators to use innovative IT in teaching and learning, to foster and enhance the digital culture in schools and universities.

Briefly stated a manageable learning environment where information is delivered more smoothly and learning is made simpler is created by enabling IT in education and utilizing technology in education.

Learning Theories and Implication for IT

Throughout the 20th and 21st centuries, several academics have tried to define teaching and learning. To make both teaching and learning more understandable, these definitions evolved into theories. Learning theories give us conceptual frameworks for interpreting the process of learning and direct us toward the locations of practical problem-solving opportunities. The majority of teaching techniques are based on learning theories. Behaviorism and constructivism are the two key philosophies of learning. These two strategies were developed from two major schools of psychology that had an impact on learning theory. They each have a unique viewpoint on teaching and learning, as well as unique methods of pedagogy and evaluation. It has been investigated how IT affects teaching and learning using constructivist learning theory. This learning theory aids in understanding the development of curricula and the connections between them and events. It also offers guidance for further study and application. The idea of constructive learning highlights the teachers' essential role in academic curriculum and offers improvements in accordance with the teachers' needs and interests as a result of the constructivist learning movement (Befrui et al., 2002).

With the aid of this theory, students may discover their capacity for learning and encourage their own personal development. Despite the theories' varied definitions of learning, the bulk



of them concurs that learning occurs when experience results in a consistent change in a person's knowledge or behavior.

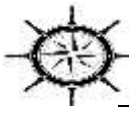
Research Methodology

The research focuses on the availability and effectiveness of Information Technology infrastructure in RYK Secondary Schools. So, data was collected from the Public Secondary Schools in RYK. It aimed to determine how IT and student learning were related, paying special attention to the accessibility, efficiency, and infrastructure of IT resources in education.

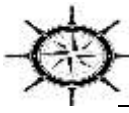
The study's methodology was descriptive in nature and used quantitative research methods to collect the data from a sample of the study. A 50-item self-structured questionnaire based on a 5-point Likert scale (i.e. Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree) was created to gather data from both male and female pupils. The questionnaire was examined by the experts to check its reliability and validity. Expert feedback led to changes in the language and style of a few items. Then pilot Study was conducted and for this aim, 20 male and 20 female students were chosen from the Secondary Schools in Rahim Yar Khan. After concerning, the research instrument was prepared and administered once more before being used as the main instrument in the study. Ten items were altered after receiving responses from the students and then finalized. The data was collected from 500 respondents (50% girls and 50% boys) out of the 20,000 student population from the Public Schools at the Secondary level in RYK. After the collection of data, it was analyzed by SPSS. Percentage, mean, and frequency values were checked peculiarly in the study.

Research Findings

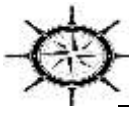
1. 48% of students agree with this statement that information technology is more convenient to get information. 13.8% were undecided, 38.2% disagree and the mean value of the data was 2.856.
2. 57.4% of respondents agree with this statement that the amount of class time is too short to allow for the use of computers in instruction. 10.4% were undecided, 32.2% disagree and the mean value of the data was 2.688.
3. 55.8% of students agree with this statement that the institution encourages instructors to prepare professional documentation and educate using computers. 9.0% were undecided, 35.2% disagree and the mean value of the data was 2.75.



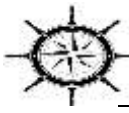
4. 48.2% of students agree with this statement that Computer education is helpful for students to prepare assignments through the Internet. 18.6% were undecided, 33.2% disagree and the mean value of the data was 2.81.
5. 66% of students agree with this statement that even slow learners can participate more actively through information technology. 12.6% were undecided, 21.4% disagree and the mean value of the data was 2.38.
6. 69.4% of students agree with this statement that traditional curricula have been replaced by technology-based curricula in developed countries. 6.6% were undecided, 24% disagree and the mean value of the data was 2.41.
7. 67.4% of students agree with this statement that Computer education produces the spirit of research-oriented learning in students. 5.4% were undecided, 27.2% disagree and the mean value of the data was 2.44.
8. 46% of students agree with this statement that they are comfortable using technology in foreign language classes. 6.0% were undecided, 48% disagree and the mean value of the data was 3.10.
9. 60.0% of students strongly agreed with this statement that IT education is the teaching of IT as a topic but also as a set of instruments for raising educational standards. 6.0% were undecided, 32.0% disagree and the mean value of the data was 2.78.
10. 72.0% of students agree with this statement that the user-ability of Information Technology resources affects students' learning in Rahim Yar Khan Secondary Schools. 4.0% were undecided, 24.0% disagree and the mean value of the data was 2.60.
11. 56.8% of disciples agree with this statement that Computer use in science can boost learning and positively impact students' attitudes. 4.6% were undecided, 23.2% disagree and the mean value of the data was 2.33.
12. 58% of students agree with this statement that IT education opens long-term career opportunities for students. 18.6% were undecided, 23.4% disagree and the mean value of the data was 2.46.
13. 66.0% of students agree with this statement that IT education makes students competitive in a challenging workplace. 12.0% were undecided, 22.0% disagree and the mean value of the data was 2.52.



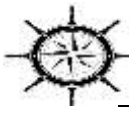
14. 62% of students agree with the statement that IT education helps students to participate strongly in their studies. 6.0% were undecided, 32.0% disagree and the mean value of the data was 2.50.
15. 55.0% of students strongly agreed with this statement t that IT education is helpful in bringing intellectual change in students' personalities. 6.2% were undecided, 38.8% disagreed and the mean value of the data was 2.79.
16. 50% of students agree with this statement that students can search for information online using a web search engine. 12.4% were undecided, 27.6% disagree and the mean value of the data was 2.53.
17. 74.0% of students agree with this statement that students can download and save files from the web. 18.0% were undecided, 30.0% disagree and the mean value of the data was 2.53.
18. 70.0% of students agree with this statement that IT education is helpful in producing qualified and highly skilled professionals. 20.0% were undecided, 28.0% disagree and the mean value of the data was 2.52.
19. 72% of students agree with this statement that students can make video conferencing on the web. 2.0% were undecided, 26.0% disagree and the mean value of the data was 2.36.
20. 61% of students agree with this statement that IT education is necessary for students to compete in the growing economy of the world. 11.8% were undecided, and 27.2% disagree. The mean value of the data was 2.42.
21. 70.0% of students agree with this statement that students use Information Technology in the classroom and at home. 6.0% were undecided, 24.0% disagree and the mean value of the data was 2.58.
22. 62.2% of the students agree with this statement that IT education updated other subjects. 15.2% were undecided, 22.6% disagree and the mean value of the data was 2.43.
23. 49.8% of students agree with this statement that Computer education brought new changes in the education system. 13.6% were undecided, 36.6% disagree and the mean value of the data was 2.78.
24. 54% of students agree with this statement 'The uses of Information Technology play a very important role in higher education institutes'. 9.6% were undecided, 36.4% disagree and the mean value of the data was 2.71.



25. 50.2% of students agree with this statement that students agreed that IT improves learning. 10.6% were undecided, 39.2% disagree and the mean value of the data was 2.79.
26. 64.0% of respondents agree with this statement that the use of IT allows taking greater control of learning. 9.0% were undecided, 27% disagree and the mean value of the data was 2.43.
27. 64% of students strongly agree with this statement ‘Do you use IT to create your digital learning resources’? 8.0% were undecided, 28.0% disagree and the mean value of the data was 2.60.
28. 70.0% of students agree with this statement ‘Do you apply IT to communicate with international peers on education-related matters’? 4.0% were undecided, 26.0% disagree and the mean value of the data was 2.42.
29. 64.0% of students agree with this statement ‘Can students better integrate Information Technology after the course’? 2.0% were undecided, 34.0% disagree and the mean value of the data was 2.56.
30. 56.8% of students agree with this statement ‘Better understanding appropriate teaching methods for IT addition’. 11.2% were undecided, 31.2% disagree and the mean value of the data was 2.56.
31. 61.2% of students agree with this statement ‘Accessibility of Information Technology resources affect students’ learning in Rahim Yar Khan Secondary Schools’. 9.2% were undecided, 29.6% disagree and the mean value of the data was 2.48.
32. 62.0% of students agree with this statement that the accessibility of Information Technology resources affects students’ learning. 10.0% were undecided, 28.0% disagree and the mean value of the data was 2.46.
33. 58.0% of students agree with this statement that the learning environment was structured to encourage development and success. 6.0% were undecided, 36.0% disagree and the mean value of the data was 2.76.
34. 66.0% of students agree with this statement that Interactive communication technology exercises in the classroom should be more common. 8.0% were undecided, 26.0% disagree and the mean value of the data was 2.58.
35. 68.0% of students agree with the statement ‘Do you learn best in a traditional classroom setting’? 10.0% were undecided, 22.0% disagree and the mean value of the data was 2.44.



36. 62.6% of students agree with the statement ‘Do you find that talking to other internet users helps you learn a lot’? 12.0% were undecided, 25.4% disagree and the mean value of the data was 2.50.
37. 70.0% of students agree with this statement ‘Do you have access to Schools technology’? 2.0% were undecided, 28.0% disagree and the mean value of the data was 2.38.
38. 74.0% of students strongly agreed with this statement ‘Do you have internet access at home’? 6.0% were undecided, 20.0% disagree and the mean value of the data was 2.46.
39. 57.6% of students agree with this statement that they like to use a computer for an assignment. 11.0% were undecided, 31.4% disagree and the mean value of the data was 2.59.
40. 64.0% of students agree with this statement that students like to use the computer instead of other teaching activities. 10.0% were undecided, 26.0% disagree and the mean value of the data was 2.76.
41. 70.0% of students agree with this statement that they like to use information technology for distance education at home. 2.0% were undecided, 28.0% disagree and the mean value of the data was 2.56.
42. 54.6% of students agree with this statement that Information Technology affects teachers’ confidence in the classroom. 18.8% were undecided, 26.6% disagree and the mean value of the data was 2.63.
43. 59.8% of students agree with this statement that the availability of Information Technology affects students’ learning in Rahim Yar Khan Secondary Schools. 11.2% were undecided, 29.0% disagree and the mean value of the data was 2.61.
44. 39.4% of the students agree with this statement ‘Do you think information technology resource information’s reliable’? 20.4% were undecided, 30.2% disagree and the mean value of the data was 2.68.
45. 62.0% of students agree with this statement ‘I wish I would not have to use a computer as part of my studies’. 18.0% were undecided, 20.0% disagree and the mean value of the data was 2.48.
46. 52.6% of respondents agree with the statement ‘Application of IT in lessons save time’. 10.8% were undecided, 36.6% disagree and the mean value of the data was 2.78.

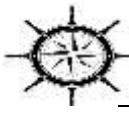


47. 62.6% of pupils agree with this statement that Information Technology makes improvements in teaching and learning. 11.6% were undecided, and 25.8% disagree the mean value of the data was 2.42.
48. 48% of students agree with this statement that all types of technology used to create, access, and modify data are together referred to as information technology (IT). 18.4% were undecided, 33.6% disagreed and the mean value of the data was 2.83.
49. 54.4% of disciples agree with this statement 'It is common for you to use more IT devices at the same time when studying'. 15.0% were undecided, 30.6% disagree and the mean value of the data was 2.65.
50. 46.4% of students agree with this statement 'Many educators are unaware of using technology in the classroom'. 21.6% were undecided, 32% disagree and the mean value of the data was 2.78.

Conclusion

It was concluded that the availability and effectiveness of IT infrastructure in Secondary Schools in Rahim Yar Khan was the medium level so the IT infrastructure should be improved in Secondary Schools. In order to measure how much learning has occurred; teachers at the Secondary School level go beyond just focusing on the needs of their students and examine their ability, knowledge, and attitude. This standard examines the changes in student behavior brought about by the instructional program. Are newly learned skills, information, or attitudes suitable for application in a student's everyday environment? Is the topic that teaching at this level aims to address? Any culture can benefit much from the educators who work there. It is a challenge, and educators must take advantage of fresh teaching and learning possibilities. They must instruct students utilizing both established and developing technology.

In every field of life, information technology is utilized. The internet, emails, laptops, and mobile devices have all become indispensable tools in modern civilization. The use of IT has made it possible for individuals to engage and communicate effectively. Utilizing effective technology in a facility is one technique to raise the standard of education. The instructors and students will also have additional chances as a result of this. All of these would lead to a more adaptable and seamless learning environment, which would enable improved outcomes and accreditations.



To sum up, it can be said that the majority of students are facing the problems like struggling with slow computer speed, internet signals issue, virus threats, poor computer working conditions, load shedding, and limited Internet access. Therefore, it is necessary to work for the improvement of these problems so that the students can learn in a good way. Information technology plays a vital role in the teaching and learning process in a better way and improvement in education sectors.

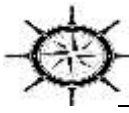
Recommendations

Based on the conclusion drawn from the study, the following suggestions are hereby recommended:

1. Public sector institutes should provide information technology to the students.
2. Teachers should provide computer-based learning to the students.
3. Internet facilities can be provided in institutions.
4. Computer-based assignments should be given by the teachers to enhance the learning of the students.
5. Fundamental computer learning courses should be compulsory at each level.
6. Computer-based training programs must be at all institutes.
7. It is recommended that computer classrooms should be in modern ways.
8. It is suggested all types of technology used to create, access, and modify data are together referred to as Information Technology.
9. It is suggested that the use of IT should be increased because Information Technology affects teachers' confidence in the classroom.
10. It is recommended that the resources IT should be provided because the accessibility of Information Technology resources affects students' learning.

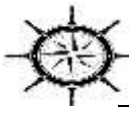
Future Direction/Research

- Other scholars who want to conduct research on this topic can include other independent variables, such as population, size, and distribution.
- Future research may target to check the uses of IT (Information Technology) at any other level or any other population.
- Future researchers can use various research tools for the study to check the area wise school understanding level of the students.



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