

IMPACT OF INFORMATION TECHNOLOGY IN THE AREA OF EDUCATION

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Abstract

With the advent of Web 2.0 information has percolated everywhere specifically, in the area of education it improved the quality of learning as well as teaching. Various resources and technologies have been used to improve the quality of the education system. Prospective teachers, as well as teachers in-service, must aware about the impact of Information technology in the field of education as well as their subject area to make learning effective. This will help teachers to know the integrated technologies impact in their classroom teaching. This paper has discussed about the impact of Information technology on education system.

Keywords: Information Technology, Education, Health

Introduction

Information technology is the application of computers to the creation, processing, storing, retrieval, and interchange of all types of electronic data and information, which may then be utilised to solve issues or carry out specific tasks as directed. Nowadays, computers are practically ubiquitous. It comprises fundamental information system knowledge as well as related skills, concepts, and terminologies. It also covers the benefits and drawbacks of information technology, the potential of information systems, and how organised information can be used to address various difficulties in daily life or how information can be programmed to address particularly challenging issues. The use of information technology in education has merged completely with the modern era. It has gained a lot of importance in today's life. Today, Information Technology are used in almost every field. Therefore, it has become necessary to learn about Information.

Information technology has provided limitless resources for learning and increased the flexibility and accessibility of education. Students can now learn information and develop knowledge from sources other than the classroom and the library thanks to the availability of online resources. Through online classes and other online resources, technology has revolutionised not only how teachers present their lectures and how students learn, but it has also opened up education to millions of students. A more interesting learning environment is produced through information technology.

The education industry is significantly impacted by information technology. It has a big impact on every aspect of life. They support us in a number of ways. They are used, for instance, in the fields of medical, manufacturing, and aviation, as well as in the creation of presentation slides in application software for taking notes and delivering lectures in colleges and universities. In summary, information performs a variety of roles in the field of student education, not just one.

It is actively utilised in many educational institutions, including schools, colleges, and large universities, to support students' learning. To create lesson plans for kids, college professors and school teachers use audio-visual strategies. To do this, they create electronic presentations regarding their lectures using Microsoft PowerPoint. These digital presentations can be viewed in schools using multimedia and sound projectors. For pupils, it is an engaging and straightforward learning strategy. Teachers can deliver multimedia (sight and sound) presentations with ease because they save so much time and effort.

Advantages of Information Technology in Education

- **Easily access to learning material:-** Students can benefit from the e-books, study aids, and sample test questions that are available on the Internet to expand their knowledge.
- **Continuous learning:-** Students may continue learning no matter where they are, including at home, thanks to information technology in education. The efficiency of the education system has considerably increased as a result.
- **Sharing of knowledge:-** Geographical barriers are no longer an obstacle for students from around the world to gather and share experiences; this is only possible thanks to technology.
- **Learning aids:-** The theory taught in class can be given some practical application by using audio and video elements, which helps students understand the subjects being covered better.
- **Distance learning:-** Today, it's possible to attend a college abroad at your convenience and

without ever leaving your native country. Anyone can earn a second degree or other certificates with the use of online courses.

- **Proper record keeping:-** The introduction of information technology in education has made it possible for safe and proper record keeping, in contrast to the past when records were kept manually and there were numerous incidents of lost files.

Review of Literature

As no research can be finished in itself without its scientific analysis of literature, the associated literature has been studied to see whether the study's objectives were met. With the aid of journals, abstracts, books, websites, and reports, among other sources, the review of the pertinent literature has been completed. The number of studies connected to information technology has been assessed to identify the major gaps in the literature.

A series of studies conducted by Y. Zhao and V. Frank (2003), R. Raja and P. C. Nagasubramani (2018), and R. Nethra (2019) found that technology has both positive and negative effects on education. Teachers and students should use this to their advantage while removing the drawbacks that are preventing many students and schools from achieving excellence. A more technologically advanced education sector should be implemented in every nation, according to the study.

The studies conducted by Kanika Budhwar (2017), Yogesh Kumar (2020), and Mohammed Al Muhtadi (2018) demonstrate that education has acquired a completely new meaning and that our educational system has changed as a result of the rapid advancement of technology. Studies have also shown that preparing kids for their lifetime learning involves innovative educational strategies that progressively integrate technology into students' daily lives. It is widely acknowledged that a well-rounded education opens the door to individual accomplishment and places students on a path of lifelong learning that equips them for success in a constantly changing environment.

Objectives

The main objectives of the study as under:

1. To examine the positive impact of Information Technology on education.
2. To analyse the negative impact of Information Technology on education.

3. To analyses the effects of Physical and mental health of students of Information technology.

Methodology adopted

The study's primary data, which were gathered from 200 randomly chosen respondents, served as the basis for the analysis. A questionnaire was created specifically to collect the primary information and in particular to look into how information technology is affecting schooling. The data was analysed using the mean, standard deviation, skewness, kurtosis, and chi-square.

Results and Discussion

Positive Impact of Information Technology on Education

The mean score (2.1650) of responses is higher than the standard average score. The standard deviation and skewness are 0.6480 and -0.173 respectively. It shows that the opinion of the Respondents is changing toward higher side of the mean standard score. The calculated value of kurtosis reveals that it is platy kurtic.

Table- 1 Positive Impact of Information Technology on Education

Sr. No	Attributes	Strongly Agree	Agree	Not Agree	Total	Mean	S.D.	Sk.	Kt.	χ^2	P-Value
1.	Ease of Access to Information	61 (30.5)	111 (55.5)	28 (14.0)	200 (100)	2.165	0.648	-0.173	-0.657	52.390	<0.01
2.	Makes Learning Easier	98 (49.0)	82 (41.0)	22 (10.0)	200 (100)	2.390	0.663	-0.632	-0.636	50.920	<0.01
3	Enhance Creativity	66 (33.0)	114 (57.0)	20 (10.0)	200 (100)	2.230	0.616	-0.184	-0.547	66.280	<0.01
4	Enhance Teaching Learning	96 (48.0)	84 (42.0)	20 (10.0)	200 (100)	2.380	0.661	-0.601	-0.655	50.080	<0.01

Note: Figures in parenthesis indicate the percentages of the row total

Source: Various Questionnaires from Respondents

The χ^2 test of goodness of fit also depicts significant difference in the distribution of opinions on the three-point scale, which also supports the above findings. The statistical analysis above makes it evident that the majority of respondents either agree or strongly agree that information technology has made it easier for everyone to acquire information.

The majority of respondents believe that using information technology to learn new things and explore the world will help students succeed in their chosen fields. The median of the respondents is greater than the median score 2, which is average. It illustrates how the majority opinion is split between replies that agree and those that strongly agree. The skewness and standard deviation are 0.6634 and -0.632, respectively. It suggests

that the distribution of their opinions on the matter is changing toward the more positive side. The calculated value of kurtosis shows that it is platy kurtic. The χ^2 value much higher than the table value at 1 percent level of significance. As a result, the null hypothesis is disproved. It is clear that respondents' opinions on this matter are not evenly distributed, and the majority of them either agree or strongly agree with the statement that information technology has made distance learning simpler because it has made information retrieval through the internet incredibly quick and easy.

It was discovered that the mean value of the respondents' responses to the question of whether technology's accessibility made it simpler to experience as many things as possible, which in turn may make them both even more productive and creative, was greater than the ordinary average score. The skewness and standard deviation are, respectively, -0.184 and 0.616. It shows that their opinions are more evenly divided between those who are unsure and those who firmly agree. The estimated value of kurtosis backs up the aforementioned assertion. After applying chi-square test of goodness of fit, the calculated value of χ^2 is 66.280, which is much higher than the table value at 1 percent level of significance. The conclusion that the respondents' replies are not dispersed equally across the topic follows from the null hypothesis being rejected and the alternative hypothesis being accepted. Thus, it is evident from the aforementioned statistical research that information technology has improved both student and instructor creativity.

The use of technology in the classroom not only improves your teaching style but also the way pupils learn. This is one of the major contributions of technology to the field of education. The greater mean score (2.380) indicates that the majority of replies are either agree or strongly agree. The foregoing conclusions are also supported by the standard deviation and skewness, which are 0.661 and -0.601, respectively. The estimated value of kurtosis shows that the responses are distributed according to a platy kurtic distribution. While applying χ^2 test of goodness of fit, it shows a significant difference in the distribution of opinions of the respondents and it further supports the above findings.

Negative Impact of Information Technology on Education

The data makes clear that respondents' opinions on how to kill social skills, impede students' interpersonal abilities, and distract pupils have a mean score that is significantly higher than the average score. The difference between their opinions is indicated at 0.5980, 0.5862, 0.6296, 0.6931, 0.6827, and 0.6702. In every situation, skewness has a negative value. As a

result, the study shown above demonstrates that respondents' opinions are more evenly distributed on the high side of the normal average score. The significant value of the χ^2 test at 1 percent level of significance manifest that the opinions of the respondents is distributed unequally regarding development of the above-mentioned sectors. It also supports the above analysis.

Table- 2 Negative Impact of Information Technology on Education

Sr. No	Attributes	Strongly Agree	Agree	Not Agree	Total	Mean	S.D.	Sk.	Kt.	χ^2	P-Value
1.	Kills Social Skills	59 (29.5)	121 (60.5)	20 (10.0)	200 (100)	2.195	0.599	-0.100	-0.401	77.830	<0.01
2.	Hindering Student's Interpersonal Skills	92 (46.0)	98 (49.0)	10 (5.0)	200 (100)	2.410	0.586	-0.400	-0.702	72.520	<0.01
3.	Distraction	91 (45.5)	93 (46.5)	16 (8.0)	200 (100)	2.375	0.630	-0.494	-0.642	57.790	<0.01

Note: Figures in parenthesis indicate the percentages of the row total

Source: Various Questionnaires from Respondents

Therefore, based on the analysis above, it can be inferred that the majority of respondents believe that technology is slowly but surely killing their social skills and that they prefer to remain alone. They are also concerned that the ease with which they can access inappropriate and invalid information not only distracts them but also impairs their ability to learn, and that the rapid advancement of technology is contributing to this..

Affects of Information Technology on health of students

Overuse of technology has a negative impact on kids' health. Technology has an impact on both physical and mental health..

Physical affects may include:

1. Obesity
2. Lesser blood circulation.
3. Curved backbone.
4. Bad body posture.
5. Headache.
6. Poor eyesight.

Mental health affects or psychological issues may include:

1. Distraction
2. Depression

3. Anxiety

Conclusion and Suggestions

From the foregoing analysis, it can be inferred that a sizable portion of the respondents believe that information technology has made it easier for everyone to access information, that distance learning is now more manageable because information can be retrieved so quickly and easily via the internet, that it has boosted student and teacher creativity, and that it not only improves teaching methods but also student learning methods. According to the poll, the majority of respondents believe that technology is slowly but surely killing their social skills and that they prefer to stay alone. They also believe that technology is easily addictive, which leads them to use it more frequently, the ease to access invalid and inappropriate things not only distract them but also affects their learning capabilities and excessive use of technology affects the health of students badly. Some suggestions as hereunder:

- Any activity needs to include communication. Additionally, poor communication is simply unacceptable when it comes to education. Communication barriers have been overcome and the dissemination of knowledge has been facilitated by the development of technology. With online collaboration technologies, anyone can easily create a community where teachers assign assignments to their students in real-time and students can ask for clarifications, if necessary, whether in a regular or virtual classroom.
- Increasing student engagement, through videos and games.

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