



Online Education: Status, Impact and Challenges (A pilot study catered to the students of Kumaun University)

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Abstract

The pandemic brought a drastic change in the learning curve of the education industry due to which millions of students were forced to miss classes. Universities/colleges/schools worldwide were forced to implement blended pedagogical approaches that included both online and offline classes for their course curriculum. During the pandemic crisis in schools and higher education portends a dark future for their students, especially those from low-income households as they lacked the necessary resources (smartphones, internet facility). To make matters even worse, pandemic created a significant learning deficit among students as their educational needs were not completely being fulfilled. The main purpose of conducting this research was to identifying the impact of online education on students as well as exploring the various challenges encountered by them during online classes. The data used in this study is primarily based, under which a series of close ended as well as open ended questionnaire were constructed which was further delivered and distributed through google forms. In addition to it the secondary data was identified with the help of few published articles and internet sources. Further some statistical tools such as measurement of central tendency (i.e., mean, median, mode, standard deviation, skewness and kurtosis) have also been utilised to generate the desired level of results.

Keywords: Online Education, Covid- 19, Pandemic, Offline Education, Digitalization

Introduction

Covid-19 has lasted a long-term impact on the educational sector of India. With almost all the schools and colleges operating their courses online through virtual classes, the history of educational sector has

been challenged to a great extent. Traditional teaching methods have been replaced by new and advanced technological advancements. Since the fifth century, the practice of grouping children for the sole purpose of augmenting knowledge existed. Covid-19 has completely changed the concepts of classical era. Online virtual classes have brought a major revolution in the existing education system. Covid-19 has been a privilege to some but has been a major disadvantage for the others. Students who were not privileged enough have lacked behind majorly due to lack of resources. With most of the teachers trying to adapt the new technological methods to educate students, online education has witnessed a boom in the education sector.

Covid-19 has resulted in universities and colleges shut across the world. There were millions of students who were out of the classroom due to this pandemic as a result universities worldwide had to adopt blended strategies of learning which consists of online and offline classes for their students. In India even before the Covid 19 there were several online education platforms available like online learning software, virtual tutoring, language apps, video conferencing tools etc. but due to increasing demand during covid 19 many learning applications are offering free access to their services for example byjus announces free live classes on its think and learn app and seen a 200% increase in its customer database. As this pandemic has changed the traditional way of teaching and learning whereby giving more emphasis on online education worldwide but when we talk about the Kumaun region of Uttarakhand the researchers have witnessed the contrary experiences associated with online mode of education. This research will further highlight the issues faced by the academicians as well as students residing in the hilly state of Uttarakhand. Uttarakhand being a developing state there are certain challenges associated to this state that are lack of infrastructure like poor road connectivity, lack of power supply in remote areas, poor network connectivity etc. Due to these problems the student of this region are facing lots of problems while attending online classes. Evidences have highlighted that the students even though they are aware of the benefits discharged by online education are of the opinion that will not recommend online classes over offline classes in the future due to the limitations of residing in the hilly state.

Since, the COVID-19 pandemic has already shown us that change is inescapable. It has acted as a spur for educational institutions to grow and use platforms using previously unexplored technologies. Pravat Kumar Jena (2020).

Sneha Jain and Tara Shankar Agarwal (2020) Due to lockdowns, quarantines, and school closures around the world, the COVID-19 pandemic has impacted over 1.5 billion pupils, 63 million teachers, and a substantial number of education support employees in the education sector. The corona pandemic has forced all of the country's schools and institutions to adopt online teaching via apps such as Zoom,

Google Meet, Cisco Webex Meetings, Teams App, and others. Classes and exams are held online, and assignments are submitted via email, WhatsApp, and other social media platforms. Every hamlet, village, and city in India should be digitally connected to improve student-teacher engagement. India should have a strong infrastructure for online education because it will aid in our country's development.

With the rise of edtech companies especially during the time of crisis the online education technology has boomed. With this UGC has also realised the importance of edtech platforms. According to a set of comprehensive reforms proposed by the University Grants Commission, edtech companies will soon be permitted to "collaborate" with higher education institutions that offer online undergraduate and postgraduate degrees to assist in the development of course content and the evaluation of students, among other things. "By amending the UGC (Open and Distance Learning Courses and Online Programmes) Regulations, 2020, institutions and colleges offering online UG and PG programmes will be permitted to engage with ed-tech platforms in the development of course material and Financial Rules," UGC chairperson M Jagadesh Kumar stated.

According to Sukanta Chaudhuri The post-pandemic crisis in schools and higher education forebodes a bleak future for Indian students, particularly those from low-income families. In addition to increasing dropout rates, the pandemic produced a significant learning deficit among individuals who did not leave school. It is merely one of many issues that must be addressed before and after reopening, compensatory measures differ greatly from one state to the next. Inevitably, the pedagogical and psychological harm caused by extended online learning will become apparent. With exponential growth, the online coaching "business" has emerged as a wildcard force whose relationships with the traditional educational system are still mostly ambiguous. It is therefore impossible to predict what value will be received even while paying a premium for education.

During the pandemic times the online education could be achieved through various modes of virtual classes like google meet, skype, zoom and google classroom.

The government of India has also launched few free online courses for the students one of them is SWAYAM is a programme designed to achieve the three cardinal principles of education policy that are access, equity and quality. The another one is Massive Open Online Courses MOOC which are free online courses where anyone can enroll.

Review of Literature

Shivangi Dhawan. (2020) In India, educational institutions (schools, colleges, and universities) are currently based solely on traditional methods of teaching and learning, that seems to be, under which they follow the traditional classroom setup of face-to-face lectures. Despite the fact that many academic units have begun to use blended learning, many are still using outdated practises. With the rapid emergence of Covid-19, a devastating disease caused by the Corona Virus (SARS-CoV-2) startled the entire world. The World Health Organization labelled it as a pandemic. This event posed a great challenge to the global education system, forcing instructors to switch to an online method of instruction overnight. Numerous academic institutions that previously hesitated to modify their old pedagogical approach are now compelled to fully embrace online teaching and learning. The value of online learning is discussed, as well as a SWOC (Strengths, Weaknesses, Opportunities, and Challenges) study of e-learning modes in a crisis. This article also discusses the rise of EdTech start-ups during pandemics and natural catastrophes, as well as recommendations for academic institutions on how to cope with the issues of online learning.

Sneha Jain and Tara Shankar Agarwal (2020) The COVID-19 pandemic has had an economic impact on a number of nations, including India. This has had an impact on every sector of the economy. Among these, India's and the world's education sectors have been severely impacted. The educational institution's closure has touched 80 percent of the world's student population, posing an unprecedented task for ministers and educational institutions to re-think and wrestle in order to preserve learning continuity while projecting long-term school closure. According to the MHRD report and the National University of Planning and Administration, infrastructural development has slowed significantly, affecting 260 million students. This article examines the effects of the corona virus pandemic on education and the education sector in India, as well as the impact of school closures caused by COVID-19. It also recommends solutions and conclusions for dealing with the Corona problem and building a long-term resilient education system.

Dr. Pravat Kumar Jena (2020) The global impact of pandemic COVID-19 can be seen in every industry. This has a negative impact on India's and the world's education sectors. It has imposed a global lockdown, which has had a negative impact on students' lives. In India, over 32 crore students have ceased attending school or college, and all educational activities have come to a halt. To overcome the threat of pandemic, the education industry has taken a unique method to surviving crises and digitising the issues. The article addresses some of the steps taken by the Indian government to ensure that education is provided to all citizens of the country. The good and negative effects of COVID-19 on

education are explored, as well as some recommendations for educational activities to be carried out during a pandemic.

Wavle, S., & Ozogul, G. (2019) This study adds to existing studies on the influence of online courses on student retention, degree completion, and achievement. The researchers used existing graduation rate data, course enrolment data, and student grades for undergraduate students at a multicampus

4-year college to assess the influence of online courses on degree completion. The goal of the study was to give advisors, teachers, and administrators a better understanding of how online classes fit into an undergraduate student's programme of study while still allowing them to finish their degrees on time. Taking one or more online classes during their undergraduate programme of study enhanced undergraduate students' chances of successfully completing their degree, regardless of campus type.

Objectives of the Study

- To access the impact of online education on students.
- To investigate major challenges faced by the students during online classes.
- To find out whether online mode of education will fulfil students need in the future

Research Methodology

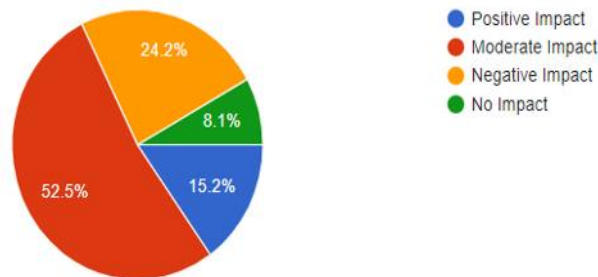
The primary objective of this study is to get the clear picture of the status of online education system during and post covid times. Surveys were carried out in government and private higher education institutes which come under Kumaun university. The data used in this type of study is primarily based. Under which a series of close ended as well as open ended questionnaire were constructed by the researchers. Distributed through google forms amongst students of different institutes of kumaun university. In addition to it the secondary data was identified through few publish articles and internet sources.

In this study simple random method of probability sampling was utilised by the researchers for data collection.

Data Analysis

Question 1 – Level of impact of online education on students as compared to offline classes

99 responses



From the above pie chart, it can be inferred that out of 99 respondents of the study majority i.e., 52.5% of the sample population comprising of students of higher education stated that there is a moderate impact on students as compared to offline classes. 15.2% states that there was a positive impact. Rest 24.2% stated that there was a negative impact of the online classes whereas 8.1% of the population states that there was no impact on them.

Analysis

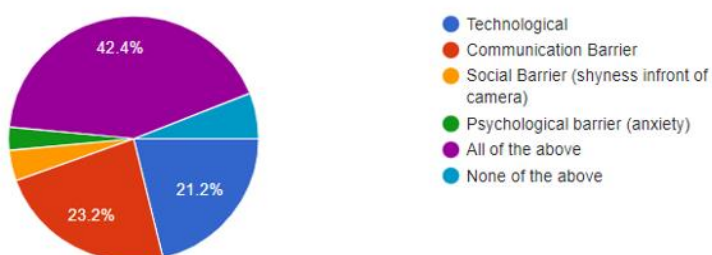
Measurement of Central Tendency	Score	Average	Result	Rank	Scale
Mean	2.41	6.41/3	2.13	2	High=3
Median	2.00				Medium =2
Mode	2.00				
Standard Deviation	1.02	–	1.02	1	Low=1
Skewness	0.50	–	0.50	1	
Kurtosis	-0.95	–	-0.95	1	

Interpretation

The average mean median and mode for the above question is 2.13. The scale was framed from High to low under which 3 is considered to be of high value, 2 is considered to be of medium value and 1 is considered to be of low value. Since the average turns out to be 2.13 it falls under scale medium by looking at it the it can be ranked as 2, which highlights that there is a moderate impact of online mode of education on students as compared to offline classes. The standard deviation is calculated as 1.02 which falls under scale low for which rank 1 is given. Skewness and Kurtosis can be identified as 0.50 and -0.95 again falls under scale low for which rank 1 is given.

Question 2 – Major challenges faced by students during online classes

99 responses



The above pie chart represents that out of 99 respondents of the study majority i.e., 42.4% of the population faced all the above challenges during online classes. 23.2% states that faced communication barrier during online classes. Rest 21.2% stated that they faced technological challenges during online classes.

Analysis

Measurement of Central Tendency	Score	Average	Result	Rank	Scale
Mean	4.38	15.38/3	5.12	3	High=3
Median	5.00				
Mode	6.00				

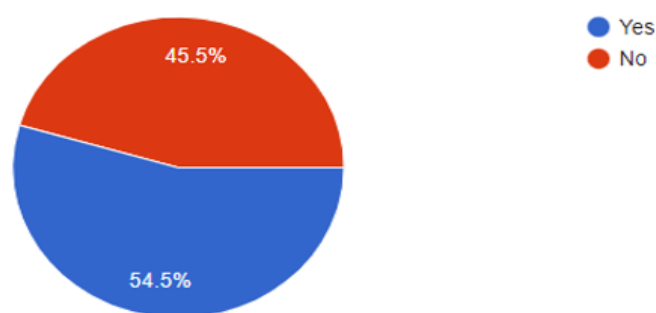
Standard Deviation	1.82	–	1.82	1	Medium =2
Skewness	-0.64	–	-0.64	1	Low=1
Kurtosis	-1.27	–	-1.27	1	

Interpretation

The average mean median and mode for the above question is 5.12. The scale was framed from High to low under which 3 is considered to be of high value, 2 is considered to be of medium value and 1 is considered to be of low value. Since the average turns out to be 5.12 it falls under scale high by looking at it the it can be ranked as 3, which highlights that there is a high impact of online mode of education on students as they have experienced several challenges during online classes. The standard deviation is calculated as 1.82 which falls under scale low for which rank 1 is given. Skewness and Kurtosis can be identified as -0.64 and -1.27 which again falls under scale low for which rank 1 is given.

Question 3 – Online education is not the need of the hour

99 responses



The above pie chart represents that out of 99 respondents of the study majority i.e., 54.5% of the sample population comprising of students of higher education agreed to the fact online education is not the need of the hour. Remaining population which is 45.5 % did not agree with this statement due to several reasons/ challenges encountered by them.

Analysis

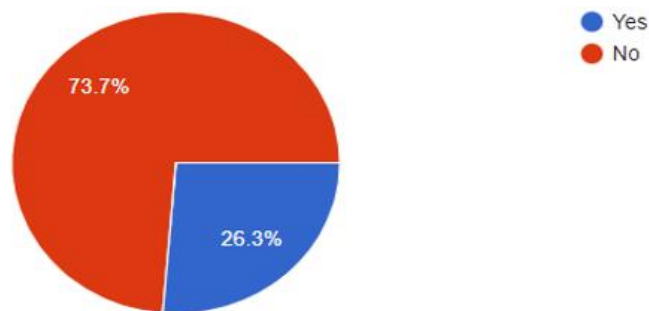
Measurement of Central Tendency	Score	Average	Result	Rank	Scale
Mean	1.45	3.45/3	1.15	1	High=3
Median	1.00				Medium =2
Mode	1.00				
Standard Deviation	0.50	–	0.50	1	Low=1
Skewness	0.19	–	0.19	1	
Kurtosis	-2.01	–	-2.01	1	

Interpretation

The average mean median and mode for the above question is 1.15. The scale was framed from High to low under which 3 is considered to be of high value, 2 is considered to be of medium value and 1 is considered to be of low value. Since the average turns out to be 1.15 it falls under scale low by looking at it the it can be ranked as 1, which highlights that there is a low impact to the fact that online education is need of the hour. The standard deviation is calculated as 0.50 which falls under scale low for which rank 1 is given. Skewness and Kurtosis can be identified as 0.19 and -2.01 again falls under scale low for which rank 1 is given.

Question 4 – Would you recommend online over offline classes in future?

99 responses



The above pie chart represents that out of 99 respondents of the study majority i.e., 73.7% of the population disagreed to the statement and agreed that they will not recommend online over offline classes in future. Whereas to the contrary 26.3% of the population agreed that they might recommend online over offline classes in future

Analysis

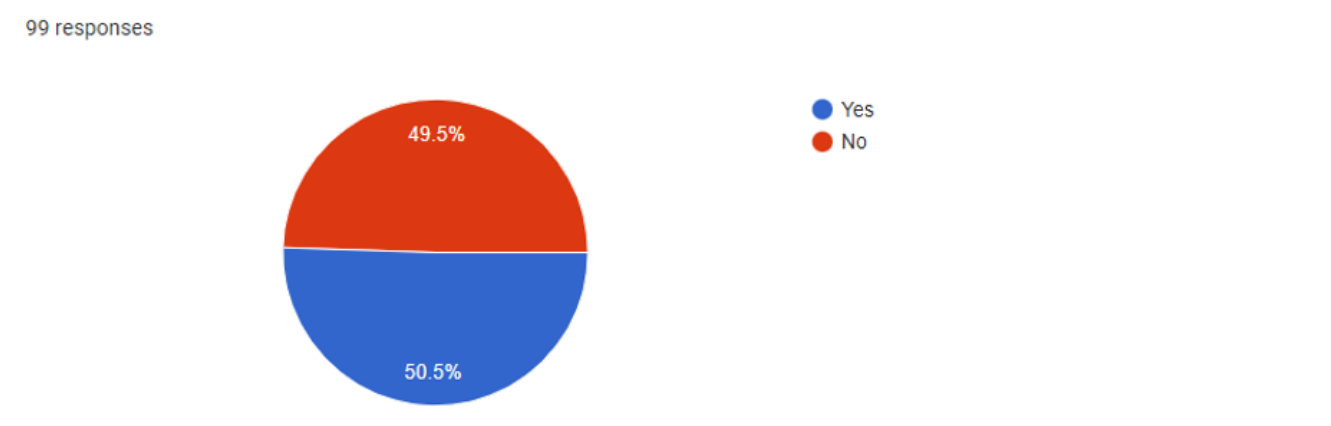
Measurement of Central Tendency	Score	Average	Result	Rank	Scale
Mean	1.74	5.74/3	1.91	1	High=3
Median	2.00				Medium =2
Mode	2.00				
Standard Deviation	0.44	—	0.44	1	Low=1
Skewness	-1.10	—	-1.10	1	
Kurtosis	-0.82	—	-0.82	1	

Interpretation

The average mean median and mode for the above question is 1.91. The scale was framed from High to low under which 3 is considered to be of high value, 2 is considered to be of medium value and 1 is

considered to be of low value. Since the average turns out to be 1.91 it falls under scale low by looking at it the it can be ranked as 1, which highlights that there is a low impact of recommending online over offline classes in future. The standard deviation is calculated as 0.44which falls under scale low for which rank 1 is given. Skewness and Kurtosis can be identified as -1.10and -0.82 again falls under scale low for which rank 1 is given.

Question 5 – Was the method of delivery of content related to subject matter was not conducted in an efficient manner?



The above pie chart represents that out of 99 respondents of the study majority i.e., 50.5% of the population agreed to the statement that the method of delivery of content related to subject matter was not conducted in an efficient manner. Rest 49.5% of the population was satisfied regarding delivery of content and its efficiency.

Analysis

Measurement of Central Tendency	Score	Average	Result	Rank	Scale
Mean	1.49	3.49/3	1.16	1	High=3
Median	1.00				Medium=2
Mode	1.00				
Standard Deviation	0.50	–	0.50	1	

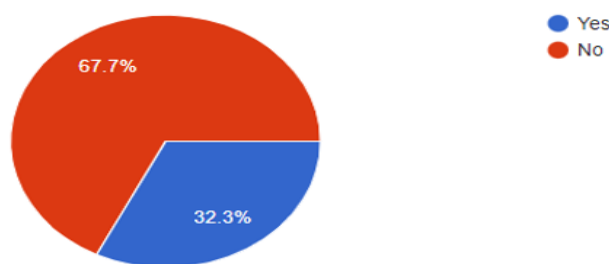
Skewness	0.02	–	0.02	1	Low=1
Kurtosis	-2.04	–	-2.04	1	

Interpretation

The average mean median and mode for the above question is 1.16. The scale was framed from High to low under which 3 is considered to be of high value, 2 is considered to be of medium value and 1 is considered to be of low value. Since the average turns out to be 1.16 it falls under scale low by looking at it the it can be ranked as 1, which highlights that there is a low impact on the method of delivery of content related to subject matter and students agreed that the delivery mechanism failed to be transferred in an efficient manner. The standard deviation is calculated as 0.50 which falls under scale low for which rank 1 is given. Skewness and Kurtosis can be identified as 0.02 and -2.04 again falls under scale low for which rank 1 is given.

Question 6 – Do you think that the new mode of education i.e., online education can fulfil different learners needs

99 responses



The above pie chart represents that out of 99 respondents of the study majority i.e., 67.7% of the population did not feel that the new mode of education i.e., online education can fulfil different learners needs whereas to the contrary 32.3% remaining population agreed that the new mode of education i.e., online education can fulfil different learners need.

Analysis

Measurement of Central Tendency	Score	Average	Result	Rank	Scale
Mean	1.68	5.68/3	1.89	1	High=3
Median	2.00				
Mode	2.00				Medium =2
Standard Deviation	0.47	–	0.47	1	
Skewness	-0.77	–	-0.77	1	Low=1
Kurtosis	-1.44	–	-1.44	1	

Interpretation

The average mean median and mode for the above question is 1.89. The scale was framed from High to low under which 3 is considered to be of high value, 2 is considered to be of medium value and 1 is considered to be of low value. Since the average turns out to be 1.89 it falls under scale low by looking at it the it can be ranked as 1 which highlights that there is a low impact of new mode of education i.e., online education and it cannot fulfil different learners needs. The standard deviation is calculated as 0.47 which falls under scale low for which rank 1 is given. Skewness and Kurtosis can be identified as -0.77 and -1.44 which again falls under scale low for which rank 1 is given.

Challenges faced by students during online classes

Here the researchers present the list of various challenges encountered by students of kumaun university who reside in different parts of the region. The challenges could be inferred from a list of open- ended question asked from the respondents:

- Majority of the students encountered technical issues due to lack of connectivity in their area of living leading to ineffective communication as students felt that there was one way communication.

- Students faced problems regarding understanding of concept as they believed that the communication in online classes was only one way.
- Students also found the online mode of education is not two ways attractive as they felt that the teachers couldn't make the virtual classes interactive as lively as offline classes, leading to the loss of interest in studies amongst students
- There were no set timings of the online classes. Classes were taken on the convenience of the teachers leading to no proper set standard of the institution
- Lack of attention from students as well as the teachers. Students encountered difficulty in understanding numerical subject. As students felt that their doubts couldn't be cleared effectively during virtual classes
- Many students don't have an upgraded smartphone that can run all online class application, this is one of the major problems encountered by students during online classes.
- Perhaps the most frequent difficulty students have in online degree programmes is a lack of face-to-face interaction with teachers and fellow students. Typically, online courses are delivered using a virtual learning environment. This platform may feature reading materials, assignments, and even a discussion forum or chat room for class discussions. Professors can train students in a number of methods, including providing slide show presentations,
- Uploading videos of recorded lectures, and even live streaming lectures. Despite the variety of methods instructors may engage students, some students just do not find virtual classrooms as interesting as traditional classrooms. The absence of face-to-face communication might be troublesome for students who are having difficulty comprehending course material.
- Students experience several difficulties during online lessons, such as connectivity issues. Additionally, many students prefer offline education, making online education harder for them to comprehend. Online classes lack the social aspect of offline sessions and classes with friends.

Suggestions

- Proper curriculum must be followed by academicians while conducting online classes
- In order to regain the interest of students group activities should be initiated on regular intervals
- Special revision sessions should be brought into the act
- Special query sessions or doubt clearing sessions should be conducted on weekends or in accordance with the convenience of students
- Various brainstorming and management games should be introduced into the curriculum

- Teachers should be given training by specialised certified trainers with respect to digitalised education platforms
- Students should be given access to various online educational programmes to enhance learning
- Universities should adapt latest technological advancements with aspects to educational benefits.
- Academicians of both higher as well as secondary education to be trained to operate the latest technological advancements

Conclusion

Online mode of education might be a boom for some however it is a bane for many who reside in the rural areas. This paper highlights the various challenges encountered by students during online classes especially those who reside in the rural parts of Uttarakhand. Issues related to technology/ connectivity, one way communication, lack of understand were the most common ones. The university should also develop a portal where all the syllabus related content is available with just one click along with it the colleges should adapt latest technological advancements with aspects to educational benefits.

References

- S Jain & T S Agarwal (2020). The impact of corona crisis on education sector in India. International Journal of Indian Psychology, 8(3), 153-160. DIP:18.01.021/20200803, DOI:10.25215/0803.021
- Dr. Pravat Kumar Jena(2020). Impact of pandemic COVID-19 on education in India. International Journal of Current Research.12(07). 12582-12586
- Wavle, S., & Ozogul, G. (2019). Investigating the impact of online classes on undergraduate degree completion. Online Learning, 23(4), 281-295. doi:10.24059/olj.v23i4.1558
- Shivangi Dhawan. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. Journal of Educational Technology Systems. 49(1) ,5–22
- Sukanta Chaudhuri online available at <https://indianexpress.com/article/opinion/columns/post-pandemic-nep-students-digital-divide-education-7798090/> accessed on 03-03-2022
- Sourav Roy Barman online available at <https://indianexpress.com/article/education/ugc-reforms-ed-tech-firms-can-tie-up-with-universities-to-develop-e-courses-7784634/> accessed on 03-03-2022