



The Influence of Pandemic-Based Online Education on the Teaching and Learning System

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Abstract: The majority of global industries were affected by the pandemic caused by a Coronavirus epidemic. This includes the academic world, which comprises of millions of enrolled students and active professors who formerly attended regular courses in their institutions but were forced to stay at home owing to the epidemic. To continue the educational process, most countries, including India, used online classes. Both teaching and learning take place in this manner using electronic devices that are relatively new to the teaching-learning community. This study sought to ascertain how online classes fared among Indian professors and students. Furthermore, it attempted to comprehend the users' experiences as well as the specific set of obstacles that this style of teaching presents. Four different surveys were developed for school kids, instructors, college students, and professors. The questions focused on many areas of online education, such as setting up online education at home, knowledge transfer, comfort, assessment, and future possibilities. The questions were distributed through Google forms. Instructors (school teachers and college professors considering all courses) and students (school and college students considering all courses) from various educational institutions around the country provided replies. The data was gathered, and the results were examined in two ways: first, from the standpoint of teaching vs the learning group, and second, from the perspective of school versus college groups on online versus normal classrooms. Despite the fact that online training/distance education has been used for a long time, research on the aforementioned issues has been limited. This is the first research of its type, reflecting the benefits and drawbacks of the new-normal online education from home in the collected voice of professors and learners in India. The study discusses the benefits and drawbacks of online education vs traditional schools. This sheds further information on how to develop technology to make them more efficient. Furthermore, this study provides an appropriate foundation for changing or creating educational policies, legislation, and plans to provide equal access to resources for all.

Keywords: Online education, online education India, online classes.

I. INTRODUCTION

The COVID-19 disrupted our daily routine and prompted a new way of living inside the confines of the walls in order to prevent the spread of this virus, which is very contagious. According to UNESCO, 186 countries would have enforced national closures by the end of April 2020, affecting 73.3 percent of all enrolled students. As a result of the entire lockdown, educational institutions have resorted to online techniques to guarantee that students' learning is not disrupted, as traditional face-to-face learning was not viable in this unique scenario. Traditional learning methods were largely accepted in poor nations like India prior to the creation and dissemination of COVID 19. However, institute closures and pressure to finish the mandated syllabus within a set time limit in accordance with the academic calendar drove educational institutions to forgo their worries and adopt emergency remote education. The national government of India declared the closure of all educational institutions, including schools, colleges, and universities, on March 16, 2020, in order to stop the spread of coronavirus infection in India, which has climbed to 114 positive cases. In addition, the centre has written a letter to all Chief Secretaries encouraging them to promote online education as a way to compensate for the closure of educational institutions and to assist students in completing their studies. As a result, several educational institutions began online lessons within two to three weeks, and by May 30, practically all educational institutions in the country had begun online classes [1].

II. METHOD OF TEACHING AND SETTING UP ONLINE CLASSES AT HOME

School children were asked a multiple-choice question regarding the strategies used to teach them. Figure 1 depicts the responses. The most frequent teaching techniques were recorded (70%) or live online lectures (20%) using television and other programmes such as Google Meet, Zoom, WhatsApp, YouTube, Microsoft Teams, and WebEx. WhatsApp was the most chosen platform (68 %) because it is simple to use and does not require any technical knowledge, making it ideal for school pupils. To augment the lectures, assignments and homework (10%) were employed. A considerable percentage of school pupils attended either recorded or live lessons taught by their teachers [2].

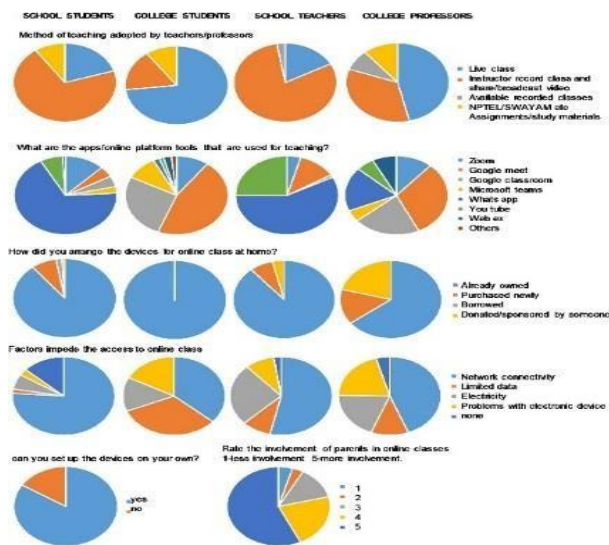


Fig. 1 Method of teaching and setting up online classes at home.

III. LEVEL OF COMFORT IN ONLINE CLASSES

The amount of comfort was determined by the schedule's tightness, refreshment intervals, bodily discomfort, and mental stress (see Fig. 2). As seen in Fig. 2, only 13% of students had adequate time to recharge between courses. Overall, the majority of students had a more relaxed schedule with less class hours than normal classes, which gave them the benefit of being able to keep up with the courses offered even if the learning environment was not perfect. Furthermore, 18% reported various physical and mental discomforts such as severe headache, strain and irritation in the eyes, loss of attention, and so on. More screen usage might be the source of these physical pressures. Regular classes were more comfortable for the majority (94 percent) than online classes. However, a small percentage of pupils (4%) reported for the opposite occurrence.

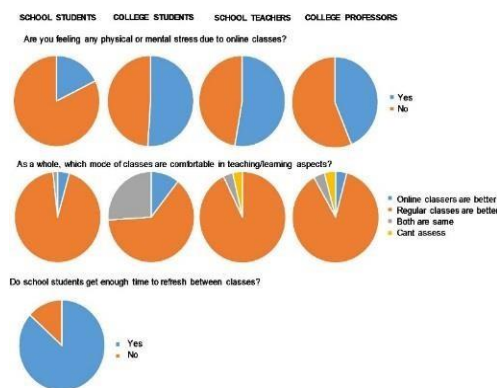


Fig. 2 Level of comfort in online classes.

IV. ATTENTIVENESS AND KNOWLEDGE TRANSFER

One of the most significant issues that online education confronts is the lack of direct connection between students and professors. "Students don't get to meet the lecturer or class members face to face," is one of the primary concerns mentioned in a case study involving 41 undergraduate students at a four-year midwestern (US) college when questioned about the negative experiences of online classes (El Mansour and Mupinga, 2007). This is supported by the findings of a survey question, in which 92.1 percent of students agreed that direct student-teacher connection is necessary for optimal learning when questioned about it (Fig. 3). It has been demonstrated that insufficient individual attention and instructor reaction time may also be contributing reasons to bad experiences faced by students in online classrooms (El Mansour and Mupinga, 2007).

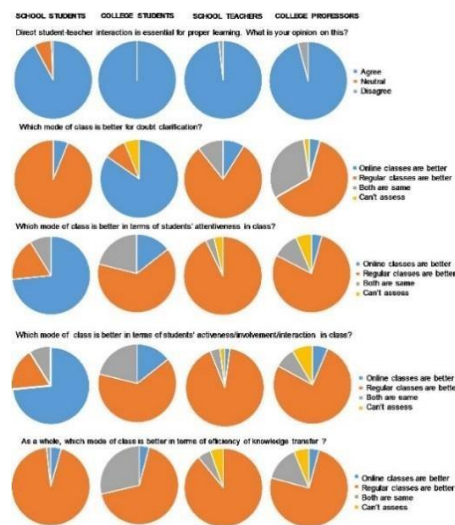


Fig. 3 Attentiveness and knowledge transfer

V. INNOVATIVENESS OF THE WORK

Existing research on the usefulness of online classrooms in distant education courses or other student or teacher training programmes is available. However, nothing is known about such programmes or online learning in India. The conditions of this study are additionally unique in that the transition to online classrooms occurred suddenly with no prior planning. The firsthand feedback we got from students and instructors from schools and institutions around the country will aid in identifying crucial areas for development. This study will ideally serve as a foundation for future studies on a much bigger size on the elements mentioned in this study, allowing us to enter a new frontier in the educational sector.

VI. CONCLUSION

Even without a pre-planned course structure or proper training for teachers or students to adapt to the change, teachers and students quickly resumed their journey by setting up emergency remote learning platforms using various online collaborative tools in hand, despite the fact that the COVID 19 pandemic struck hard in every walk of life. Both the learners' and teachers' groups were overwhelmingly supportive of regular courses. In terms of efficiency, engagement, and overall comprehension, most people thought regular classes were preferable. Although there is some comfort in learning/teaching from home, the process is hard on students and teachers due to different technological challenges and the extra effort required.

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