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SMARTPHONES AS TEACHING AND LEARNING TOOL FOR PRE-SERVICE AND IN-SERVICE SPECIAL EDUCATION PROFESSIONALS DURING PANDEMIC

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ABSTRACT

As a result of the coronavirus shutdown, the bulk of the world's population became agitated. Courses have been rescheduled. As a result, we complete the course with the help of technology, particularly smartphones. The study's primary purpose was to examine the advantages and disadvantages of using smartphones to attend and organize online classes for teacher trainees and master trainers. The 50 participants came from a teacher training institute that offers D.Ed. Special Education (Intellectual Disability) and B.Ed. Special Education (Intellectual Disability). The study's primary finding highlighted how essential and beneficial smartphones are in helping teachers give lectures and complete their syllabus on time. Smartphones can save costs and are readily available to the majority of students. However, delivering exams is difficult due to inadequate internet availability in rural areas. This study can be used in various courses and at the school level.

Keywords: *Smartphones, Special education, ICT, Teacher trainees, Master trainer, CWSN.*

INTRODUCTION

A third of the world's population has been quarantined (Rehman et al., 2020) because of the Coronavirus and most extensive and most restrictive mass quarantines have been implemented by India, China, Italy, France, New Zealand, Poland, and the United Kingdom (A Third of the Global Population Is on Coronavirus Lockdown — Here's Our Constantly Updated List of Countries and Restrictions, 2020). Over 1.3 billion people in India are locked inside their houses due to the pandemic. All universities, colleges, schools, and other teaching and learning institutions are closed to maintain social distance. Students, particularly scientific students and teacher trainees with primarily practical foundations, suffer from not finishing courses on time. When updated with technology, self-monitoring approaches significantly boost on-task behaviour across educational contexts and different categories of disabilities (Niwas et al., 2018). When revised with different types of technology, self-monitoring strategies maintain favourable activated effects on behaviour and deliver similar outcomes (Bedesem, 2012). According to the authors, the employment of new technologies in the classroom as a means of helping literacy development in the field of digital media is becoming increasingly important. The Internet has delivered many educational resources during the last two decades, including books, scientific research, lectures, video classes, and instructive games. Since the introduction of social networks, online engagement between people has risen, allowing learners to comment and collaborate. (Herrington and Parker, 2013).

In special education, the goal of technology is to allow kids to study in a way that suits their unique learning styles and limitations (The Use of Technology in Special Education | UT Permian Basin Online, 2020). In the classroom, the impact of information and communication technology (ICT) is growing, and practice demonstrates that individual work is necessary for the educational process (Iskrenovic-Momcilovic & Momcilovic, 2021). Students may use their smartphones and the Internet to access their study materials from anywhere, thanks to technologies. Smartphone devices assist e-books, handheld audio and multimedia guides, gaming consoles, personal digital assistants (PDA), tablet computers, mobile phones, and smartphones (Kljunic &Vukovac, 2015). Because laptops are too large and heavy to be carried when walking or travelling, they are not typically referred to as smartphones. The smartphone was provided with leisure activity files that could be accessed or engaged and a list of contactable acquaintances to converse with the smartphone using specific voice inputs (Lancioni,

Singh, O'Reilly, Sigafoos Campodonico & Alberti, 2017).

Websites and Apps for Online Classes

Millions of people worldwide are using online resources to complete their higher education. Professionals and students looking for more tools to satisfy their thirst for knowledge can use several e-learning apps and websites.

iTunes U (iOS): This is an Apple educational initiative that provides free online courses in various disciplines taught by professors from leading universities. This software contains many resources, such as e-books, audio, and movies. Assignments, a text highlighter, text, and notes are included to assist students with their course work. This software allows accessing over 750000 courses and books for free. Although no iTunes software is available for Android, Apple does give an Apple Music app. we may sync the iTunes music library to an Android device using the Apple Music app. All we have to do now is ensure that our Apple Music app and iTunes on PC use the same Apple ID. (Stockton, 2019). Primarily, we can sync the choice of Music and videos for children with special needs. We can sync the music and movie choices for youngsters with specific needs.

Khan Academy: Khan Academy offers practice questions, instructional videos, and a personalized learning dashboard that allows students to study at their own pace both inside and outside of the classroom (About | Khan Academy, n.d.). Math, science, computing, history, art history, economics, other subjects, and K-14 and test preparation (SAT, Praxis, LSAT) curriculum are all covered. It focuses on skill mastery to assist students in laying solid foundations.

Coursera: Coursera works with over 200 top institutions and businesses worldwide to give individuals and organizations flexible, affordable, and job-relevant online learning. We provide diverse learning opportunities, from hands-on projects and courses to job-ready credentials and degree programmes (About Coursera, n.d.). Coursera is free to use for both students and professors. Lectures, quizzes, online forum discussions, assessments, and assignments are all part of the curriculum.

Udemy: Udemy is an excellent match for us. Customers can use their marketplace to get fresh, up-to-date courses that their staff curates. Udemy provides flexible and worldwide solutions to corporate demands. It is the best alternative for our employees and their future possibilities. Students can select between free and paid courses or both. Programming, web development, and guitar instruction are among their services. A lecture series is also available, including video, PowerPoint, PDF, and other forms.

LinkedIn: Previously, LinkedIn was called Lynda. LinkedIn was founded in Reid Hoffman's living room in 2002 and officially debuted on May 5, 2003. LinkedIn has become a diversified corporation under Ryan Roslansky's leadership, with revenue from membership fees, advertising sales, and recruitment solutions. Its purpose is to provide economic opportunities to every member of the global workforce. It charges a monthly subscription for online learning services such as 3D animation, photography, and design. Its collection includes over 2,500 expert-led courses that may be viewed on a computer or via an Android or iOS app. Learners can access various online courses and learning resources through ALISON, Brightstorm, Howcast, Code academy, TED, Big Think, Open culture, Open Education Consortium, Academic Earth, EdX, and other websites and applications. Some are free, while others need payment. The following websites and apps can help in meeting planning:

Zoom: Zoom is the most popular free meeting software and website, allowing up to 100 people, including students and trainers, to hold meetings and lessons for up to 60 minutes. This programme can handle a vast number of meetings in a single day. This software is not safe, though, because encryption is not provided. There are additional options for screen sharing and recording.

Google Meet: Google Meet is a revamped version of Google Hangouts for video conferencing with screen sharing and recording capabilities. It is a premium website with a safe and encrypted app. We can purchase according to our needs.

Go to Meetings: The features are instant meetings, scheduling, meeting transcription services, and in-app meeting discussions between participants also have a paid service (Boyarsky, 2017).

Cisco WebEx: It can manage large groups of students when giving online classes. WebEx has all of the features that Zoom and Google Meet have.

Jitsi: Jitsi is a company that provides free video conferencing, allowing us to hold classes with all of the necessary features at no cost.

Google Hangouts, BlueJeans, Slack, Appear. In, BigBlueButton, and others are among the

programmes and services that facilitate the conduct of lessons. Government and private teacher education organizations provide online classes to their trainees. These meeting apps were beneficial to master trainers and teacher trainees working in special education or through training. These apps and web tools assisted in the real-time instruction of children with special needs.

The study's primary purpose was to examine the advantages and disadvantages of using smartphones to attend and organize online classes for teacher trainees and master trainers.

METHODS

Fifty people including 40 trainees and 10 Master trainers from a teacher training institute that offers D.Ed. Special Education (Intellectual Disability) and B.Ed. Special Education courses (Intellectual Disability) contributed their valuable time to the interview. A qualitative research design was used to perform the study. 10 trainees and two Master trainers did not participate. The researcher devised descriptive questions to understand the advantages and disadvantages that teacher trainees and master trainers face when attending and arranging online lessons. The data was collected via stratified random sampling. In detailed they were asked advantages and disadvantages of online classes through the usage of smartphone apps. The whole process took 15 days two hours daily and an average of 20-30 minutes for discussion/ interview. for gathering the information. The researchers promised not to disclose their names in front of the administration. The fictitious situations were placed in front of them to think about and reply to. They were anxious about the present situation of the education system.

MAJOR FINDINGS

According to the data, the following are some of the advantages of attending college online:

- It gives students and teachers the freedom to create their schedules.
- More timely and efficient completion of the course.
- Students do not need to travel to institutions to learn; instead, they can take classes from the comfort of their own homes, and it is immediately available.
- We can use our time in lockdown to improve our mental health.
- Because of the Internet, classes can be accessed via smartphones anywhere.
- Smartphones are compact and portable devices that take up very little space.
- Classroom management and planning. Apps can provide class reminders.
- There is no need for physical documentation because everything can be managed online.
- Reduces travel expenses.
- There is no need to leave the house during the lockdown; social distance can be maintained.
- Online lessons can also be beneficial to homemakers.
- It made it possible for the master trainer to work from home.
- It also aided organizations in holding scholarly conferences and faculty development programmes.

The following are some of the disadvantages of taking online classes that were discovered:

- A lack of practical experience depletes students' drive.
- Online classes do not assist the youngster in developing interpersonal skills and instead make them feel insecure.
- The teacher and the students have a delayed and partial interaction. Face-to-face interaction is impossible when there are a significant number of users.
- Background noise disrupts the classes when there is a question-and-answer session.
- Has difficulties in class. We will not be able to obtain any teaching experience in the actual world.
- Online examinations are impossible for students who left their communities before the lockdown, and internet connectivity with 4G data is unavailable.
- Online tests will be charged to students.
- Online education strategies for children with special needs entirely depend on their parents. It is not easy to establish a teacher-student relationship.
- Data is consumed quickly. Low-income families are unable to make financial arrangements in this challenging situation.
- Some academics and trainees cannot accomplish their responsibilities on time because they have difficulty adjusting to current technologies.

DISCUSSION

Before the implementation of COVID-19, technology use in the teaching, learning, and

training fields was avoided or resisted by both people with disabilities and the general public, particularly when it came to smartphone apps like Google Meet, Zoom, Webex, etc. However, the pandemic has brought about a paradigm and cultural shift in the approaches to teaching and training kids with I/DD. Without heavily relying on online teaching resources, it would be challenging to manage teaching-learning situations in the educational environment following the COVID-19 epidemic (Mishra et al., 2020). To encourage children with intellectual disabilities to be interested in learning new things, special education teachers, master trainers, and parents wished to learn smartphone technology. Every technology should be available to everyone with disabilities, according to the UNCRPD Act of 2006 (NIWAS et al., 2018). In this study, pre-service and in-service special education teachers as well as master trainers were used to gather information about the benefits and drawbacks of using smartphones in teaching and training (Voogt et al., 2018). The key findings presented both advantages and disadvantages of using smartphones to educate and train kids with intellectual disabilities (CWIDs). Parents and teachers who have CWIDs can still create their own schedules outside of office hours. Numerous options are suitable for family needs and schedules (UNICEF, 2020). In a survey of Ministries of Education on National Responses to COVID-19 conducted by UNESCO, UNICEF, and the World Bank, educators were given assistance by sharing guidelines emphasising the significance of providing feedback to students, keeping in constant contact with caregivers, and reporting to local education units to keep track of learning (UNESCO et al., 2020).

According to OECD (2020), it is recommended to develop targeted policy initiatives to lessen the burden on parents and help teachers and schools make the most of digital learning, especially given the current situation. Technology has ushered in a new era in terms of data collection and mental health support. Mobile devices like smartphones and tablets are giving the general public, medical professionals, and researchers new opportunities to track treatment progress and learn more about mental health (Technology and the Future of Mental Health Treatment, n.d.). Younger generations make up pre-service special educators, but few in-service special educators have a fear of utilising cutting-edge technologies. The institution must plan faculty development programmes to provide instruction on smartphone-based technology. The use of Google Classroom apps was also very beneficial in the training of parents with CWIDs, master trainers, and pre-service teachers. The National Repository of Open Educational Resources (Mysore & Rangaswamy, 2021), Swayam Prabha Channel, Shiksha Van, E-Path Shala, and Diksha are a few of the initiatives led by the Department of School Education and Literacy of the Ministry of Human Resources Development (NROER). It's important to note that each state has its own online education projects tailored to its specific needs, in addition to the efforts of the Indian central government (Singh et al., 2021). But only well-known institutions were the focus in India. Due to financial difficulties during pandemics, fewer NGOs have carried out their training programme (Budget, 2021). The entire time had to be given by parents to CWIDs. The special educators who were in training and already working took fewer classes as a result. One of the most challenging tasks was conducting online tests because of the requirement for clarity and internet connectivity. According to a UNESCO report, only 19% of Indian schools have access to the internet. As general educational standards are raised and more equity is achieved in academic success over the next ten years, quality of education will be the biggest issue (Bureau, 2021).

CONCLUSION

Smartphones have made learning more accessible. Because most students in this region cannot afford laptops, teacher trainees utilize their smartphones to deliver live classes. Smartphones allow teacher candidates to attend classes and download assignments, participate in quizzes, and prepare study materials for their practical subjects through various learning apps. Take online courses, collect study materials, and participate in online video classes with the opportunity to share the screen and record lectures using a variety of apps and websites. Some websites and programmes are free, while others need money. Many teachers and students are forced to use the insecure Zoom app and website due to a lack of funding and require capacity-building projects. Due to the heavy burden on parents, only a few classes were conducted by the pre-and in-service special educators. Conducting online exams was one of the major issues due to maintaining clarity and internet connectivity. This

research can be conducted on large samples in public and private institutions and inclusive schools. We should also be aware of special educators' perspectives.

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