FULL PAPER



Impact of Covid-19 on education scenario and digital divide in India

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<i>.</i>	on the education system and digital divided in India. The
^b Associate Professor, School of Management, KIIT	pandemic has not only derailed economy, but also has affected the
University, Odisha, India	education system of the world and particularly India. Since more
	than one and a half years, all the educational institutions have
	closed and those few, which are having better infrastructure
	facility for digitalization, are only able to survive to some extent.
	Various educational institutes, which are not able to cope with the
	time, are forced to close their institutes. This is survival of the
	fittest. This scenario of uncertainty is unprecedented over recent
	times. The present VUCA environment has inspired the present
	paper. To do so, secondary data were applied and the aim was to
	undertake a research project on digital divide in higher education
*Corresponding Author:	system in this eastern part of country, i.e. Odisha.
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Tel.: +919861214986	Covid-19; educational institutes; digital divide; students.

Introduction

The concept of digital divide is usually described as the gap between people with access to information and communication technologies and those with no access. These forms are mainly the Internet and computers [1]. Typically, rapid technological change takes place unevenly. There is no question that the use of new information and communication technologies (ICTs) has progressed at an unprecedented speed, but dissemination patterns are less evident and change fast [2]. In order to increase and develop information society, technological change is a major contribution. Failing access to IT leads to digital division and influences society's growth and development by driving some people who have access to information and depriving others that do not have access to information[3].

This study aimed at unravelling the various issues faced by the educational institutes during Covid-19 and digital divide, undertaking projects on the digital divide in higher education scenario in the state of Odisha, and contributing to the existing literature.

Methodology

The present study is based on relevant information gathered through e-survey of the literature and from various libraries. The papers were analyzed and compiled briefly to find the impact of COVID-19 in educational institutes and digital divide in the country. The paper was developed with the help of secondary data.

Covid-19 pandemic and education scenario in India

Novel Coronavirus Disease (COVID-19) during lockdown, not only in India but throughout the

Objectives of the study



world resulted in the collapse of the whole educational system of primary and tertiary levels. The Corona virus revealed that educational systems around the world have developed vulnerabilities. It is now clear that society needs flexible, resilient systems of education as we face unpredictable prospects [4]. In the context of the outbreak of COVID-19, governments and tertiary agencies around the world are launching different political initiatives to pursue the teaching of the virus. There is however ambiguity and disagreement on what to do, how to teach, the workloads of teachers and students, and the educational equity consequences [5]. There is no doubt that institutions which do not have such measures of preparation and planning now need to implement to prevent the exaggerated demands and tensions arising from rapid adoption. In this crisis, there is a clear need for online learning after secondary education expertise and the idea that institutions need to develop this skill should be recalled.

About 264 million children and adolescents were not in school [6], and the pandemic has further exacerbated this situation. As the Pandemic COVID-19 speeded, the only option left was online education and schools, colleges and universities should not be shut down indefinitely [7]. Therefore, this was the time serious rethinking, revamping and for redesigning the education system in a very demanding context. Informal and non-formal training also had a huge impact. But it was a well-conceived belief that the high position of formal education cannot be replaced by a pedagogical approach because of the direct interaction between teachers. However, following the COVID 19 crisis, e-learning became a pedagogical change from traditional methods, from classroom to zoom, from personal to virtual, from seminars to webinars [8].

E-learning, distance education, and correspondence courses were historically generally viewed as part of non-formal schooling, but if current trends continue, it appears that they will eventually overtake the formal education system. The COVID-19 crisis has driven both teachers and students to embrace the interactive academic experience as the ultimate benefit of the online learning process [9]. Through digital intelligence [10], teachers were able, in future pandemics in particular where children rely wholly on online learning, to cater for a child's digital skills that are on the brink of cyber risk and educational success. In addition, in a COVID-19 period, online learning provides the community with a feeling of psychological security.

The resilience must be built into our educational structures, and they described three developments that could be seen in future transitions, including increased educational creativity, а strengthened educational relationship between the public and private sectors, and the digital divide gap [11]. Without the rigorous use of online resources, the post-COVID-19 outbreak educational situation will be difficult to handle. After witnessing the terrible corona virus, students will face a slew of obstacles, including quality education, practical training, laboratory work, library services, peer tutoring, remedial teaching, science, and In addition, the creativity. student's experience will be highly significant. the attempted solution for Therefore, education tangles after COVID-19 is to keep the balance of online and offline teaching [8]. Digital technology has accelerated lockdown. It has provided an opportunity for new and better professional skills and knowledge to be developed more efficiently and effectively through online learning. In this pandemic, online learning is the best solution Case Covid-19 [12].

The Government of India has taken numerous preventive measures to prevent the spread of COVID-19 pandemics. On 16 March 2020, the union government declared all educational establishments to be locked down across the country. The current educational



scenario was taken seriously by the Apex regulatory body for higher education, UGC, India, and has proactively addressed the deadlock of courses and examinations in the on-going half-year period, as well as issued a circular on the academic calendar, following the recommendations of a UGC committee. It was decided that the 25 percent curriculum through online teaching and 75 percent face to face interaction was also mandatory for all universities in India [13]. The government's digital India view emerged as a vital tool to resolve the current crisis thanks to Covid-19. Education based on technology is more transparent, with all due regarded. With this challenge being shut down by colleges and schools, the Indian Government and state governments and private institutions have taken the right action. The MHRD has arranged for a number of things, Direct to Home TV, Radio for students to learn, including online portals and learning channels. During the lock-in period, students use popular social media tools as an online learning system such as WhatsApp, Zoom, Google Meeting, Telegram, Youtube Live, and Facebook. E-Broucherhttps://mhrd.gov.in/ict-initiatives was а single platform combining all digital resources on the Internet for education was the ICT initiative of MHRD.

Many institutions have carried out online faculty development programs to enhance faculty's positive outcomes in the crisis. There is no great difference in the feeling that faculty can use power points and play videos and board and marker as regular classroom sessions in both online and offline sessions [14]. e-PG Pathshala was intended for postgraduate students. During this period of lockdown, post-graduate students can access the eBooks, online classes and study materials. The most important on this platform was that these facilities were accessible without the use of the Internet for the whole day. During the time of lockdown, many institutions have taken free, online courses for students.

Sources of the E-Library and EBooks were shared with students. In addition to regular virtual class participation, different initiatives have been taken for the involvement of students [14]. In the social, health, politics, education and employment fields, the COVID-19 pandemic has devastating effects on society. In the field of education, a paradigm shift goes beyond methodological parameters. The fact that the education systems have to transfer from face-to-face to online learning, at a speedy pace, leads different educational authorities to make ICT one more methodological resource a necessary way to avoid the collapse of the education system so that the process is not interrupted [15].

Digital divide, higher education and COVID 19

The first most obvious concern about switching to online learning is the access problem. In a country in which the majority of students do not have access to digital devices like smart phones or laptops, to internet connectivity or to the same level of education, it is impossible for them to have access to online education. Of course, higher education institutions have a bearing on lockdown measures. Most of the students and staff in the universities had to leave the campus and go home. Teaching/learning face to face has been stopped and we have seen a number of universities focusing on what is referred to as online teaching/learning [16]. There were two concerns with regard to online learning. Firstly, there is distributive justice – there is unequal access to technologies used in online learning and unfair access to data and connectivity in an unequal country such as India. The second issue is the epistemological access, and it is to be noted that access to technologies does not guarantee for all the students. Regular discussions about the materiality of the smart phone ownership as a new mantra in India to bridge the digital divide have failed to take account in times of



crisis of its spatial and infrastructural dimension [17].

The digital divides between India and its rapid entry into the rural-urban divide have a long history, seeming to have been largely overlooked by the third generation (3G), and the fourth generation (4G) [18]. In India, people rely heavily on strong internet, computers or mobile phones to return to business during the new normal period. As there is no end to the crisis, students are encouraged to take up e-learning opportunities. The current pandemic affects rural students more than those living in towns when the country is engaged in online education [19]. However, even in remote rural areas, E-learning is transforming the sector. By investing in the improvement of digital educational processes, Tier 3 and Tier 4 towns increase the ante. While many can take benefits of what online learning offers, the integration of high-speed Internet facilities is difficult by local authorities. In addition, rural communities also have to deal with intermittent power and older electronic equipment that are often a barrier to seamless access [19]. During the period from 2018 to 2020, while indigenous families did not acquire other assets such as TV and vehicles, ownership of smartphone has increased considerably. For example, in homes where children enrolled in government schools, smartphone ownership has grown up to 74.2 percent in 2020 and is 24 percentage points higher than in 2018, from 29.6 percent in 2018 to 56.2 percent in 2020, and in households where children attend private schools [20].

Unfortunately, students in rural India cannot get the latest equipment and access to online content that urban Indians enjoy every day. A smaller percentage of students in towns have desktop or laptop computing, unlike their counterparts in cities. You rely on the mobile telephones of your family members for learning and classes, which is a difficult exercise. The health of students can be damaging if small screens use the greatest amount of information possible for long hours. In addition, acquiring learning data plans can also entail a lot of expenses for families facing financial limitations. The level of participation of both teachers and students in live classes could also be affected. For over a decade, our country has had serious concerns about digital literacy and the digital divide. Many rural teachers and students cannot match educational and student technical skills in cities.

In making the transition from physical to online learning, many private educational institutions were quick and agile. On the other hand, most government educational institutes, except for some of the most important institutions, such as IIT, NITs, IIMs, and some of the main universities, have difficulty making this transition. Some of these institutes' challenges include a lack of digital content, lack of teacher training in the use of virtual teaching and tools, as well as poor or no technology investments. Digital infrastructure and connectivity vary from state to state and between urban and rural, and not only socioeconomic but also regional disparities in access are evident. Many teachers (urban and rural) judged their own preparedness to "nontechnically sound" and "had very little knowledge of digital technology."

When students move from off-line to online learning, they encounter blocks that may be a cause of discontent in rural communities. For teachers and students to continue learning, joint efforts of civil society organizations, policy makers and the government need to create a user-friendly digital interface. On the bright side, all stakeholders have invested heavily in improving access to digital services and E-learning and could facilitate the digital inclusion process through the building on existing infrastructure. Teachers can smoothly transition if they receive the support they need. To speed up the process of launching innovative and affordable online learning tools in rural India, local and national governments should collaborate with IT and



education authorities. The introduction of the National Broadband Mission to provide broadband for all Indian villages by 2022 is a welcome step towards digital inclusion, but it is necessary to ensure last-mile connectivity and digital device ownership for content access.

Conclusion

The pandemic scenario derailed entire education system in India. Due to this, the government has to postpone the examinations number of time and also taken decision to pass the students of 10^{th} and 12^{th} without appearing any examination. This will be a liability in the long run. Students having complained about being unable to access the network in rural areas and also in urban areas also have the same issue. NEET and NTA examinations are still not able to finalize the dates. The present arrangement is only stop gap arrangement. It is hoped everything be back on track and normalized the situation and we can deliver in offline. However, some positive sides also reflected in this hard period. Like, now the conferences, seminars, webinars, interviews, and other resource persons can be accessed through digital mode.

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