Sustainable Digital Education: Does It Make Global Citizenship Education More Accessible

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Abstract

Education is seen as one of the critical components of national development and global competitiveness for nations and its students. It can also be looked at for its sustainability and connectivity purposes. Therefore, HEIs all over the world are employing the strategy of equipping its graduates with the required skillsets and competencies that will help them navigate the global and diverse outside world. Since not all staff and academic scholars can avail of some essential services to build the said skillset, a new branch of internationalization has developed known as Internationalization at Home. Pre-COVID times, human contact, travel across the borders and physical exchange mobilities were important to develop the required multicultural skills. However, after the pandemic hit, the focus has shifted towards developing the skills through borderless means like virtual mobility, online classroom learning and other aspects of "digital education". Countries are focusing more on developing collaborations and joint ventures with universities across the world to participate in the exchange of knowledge and best practices. This chapter, along with critically looking at the sustainability of online education, also examines if digital education can make education more accessible to its stakeholders. Tying the article together is the concept of Global Citizenship Education (GCE) that highlights the importance of knowledge, skills, and values for the involvement of students in all levels. Emphasis should be on graduate experience at home and abroad which makes digital education a vehicle to align IHE with global citizenship education.

Keywords – Sustainable, Internationalization, Digital, Covid, India, Education

Introduction

Education is seen as one of the critical components of national development and global competitiveness, regardless be it nations or their individuals. It can also be consulted when issues of sustainability and connectivity rise up. Therefore, Higher Education Institutions (HEIs) all over the world are employing the strategy of equipping their graduates with the required skill sets and competencies that will help them navigate the diverse, global world outside. Education has always had an international aspect - if we see in the case of India, there have been institutions like Nalanda and Takshyashila where scholars of international repute and disposition have come for studying and research purposes. Even now, if Indian campuses are considered, there would be a healthy amount of international presence in the university which we will be talking about later. This international facet of education allows it to permeate through different cultures, countries, without any regards to the physical restrictions. Maybe this aspect could also be an advantage if universities want to further the impact of globalization. This is where internationalization of higher education comes in. As explained by Jane Knight, internationalization is the process of putting forth an international or global or intercultural element in all processes related to education beyond secondary education, particularly when it comes to teaching, research and so on (Knight, 2005). Internationalization could be looked at from the formal and informal perspectives of the institution (Knight, 2005). While the formal methods would include changes in the curriculum, pedagogy, administrative functions and more, informal ways would compose of the cultural fests, annual events held in the college and other such extracurricular initiatives allowing for the interaction of the diverse population in the university campus. Internationalization, explained as both a companion and a reaction towards globalization, has been seen as an array of responses, available as a reply to different opportunities and notions brought in by forces of globalization. However, after the pandemic hit, internationalization has taken on a new form, especially in India. It has become a topic that every educator is talking about and exploring for their university because there is not much other choice left. This is not like pre-COVID times where human contact, travel across the borders and physical exchange mobilities were important to develop multicultural competencies that would in return open the door to gaining global citizenship attributes. Post-COVID, online education, virtual mobility, online classroom learning and other methods of "digital education", a part of internationalization at home, were the only means to teach students how to handle a global atmosphere, intercultural sensitivity and other multicultural competencies. Countries started focusing more on collaborations, joint ventures and their partnerships with universities across the world to participate in the exchange of knowledge and best practices. This is where this chapter aims to contribute. After a brief introduction, the chapter will highlight on the lenses that will be seen through to present the case study of post-pandemic India i.e., Internationalization at Home, Sustainability through Sustainable Development Goals (SDGs) which will also include a brief paragraph on Social Justice in Education and Global Citizenship Education (GCE). The next section in the chapter looks at the main scenario - the transformation of the Indian Education System from pre-COVID times to after the pandemic, where challenges and opportunities will be covered in equal length. The final section of the chapter will have the discussions touching on the three points of contention that the case study reveals followed by conclusions containing the summary of the findings in the chapter

The Tri-Angles

Internationalization can be divided into two parts - Internationalization Abroad and Internationalization at Home (IaH) out which we will be mainly focusing on IaH. IaH was coined as a concept in 1999. The need for dissemination of education beyond borders was the vacuum needed to create IaH. IaH, at that time as well as in current times, aimed to make students interculturally and internationally competent without leaving their own city for study-related purposes (Crowther et al., 2000). Beelen and Jones defined IaH in the lines of Jane Knight's definition of internationalization - a conscious method of integration of intercultural and international dimensions into the formal and informal curriculum for students within their domestic learning environment (Beelen& Jones, 2015). IaH was, however, not to be implemented randomly in the institution. It had to be planned with the aim and purpose of involving everyone in the hierarchy, for it to be implemented properly.

Further investigating the definition of IaH, we will see that IaH putting the international and intercultural factors together would entail international being an intimate part of the regular teaching and learning process in the formal and informal feature of the institution (Beelen& Jones, 2015). While the formal curriculum is much more structured, the informal aspect is dependent on the voluntary participation and internal curiosity and openness of the individuals involved in the process. Informal means in the case of IaH would be interacting with local groups, organizations, communities as well as bridging the gap between the university and the locality (Beelen& Jones, 2015). Internationalization at home is consequently an umbrella term for aspects starting from the academic curriculum, the interactions between local students, international students and faculty, the collaboration on internationally focused research projects, innovative uses of digital technology and more. IaH is given importance in the current scenario because of its accessibility - the benefits reaching the students who do not have the ability to travel due to social or economic reasons and not just that small number who are able to indulge in mobility. Post pandemic, with travel restrictions and the second wave plaguing India, IaH in India has been bumped up to the status of a necessity rather than a luxury, forcing academicians to explore IaH.

Within IaH, the concept that we would be dealing with mostly is online learning or digital learning. The framework of digital education is based on one premise - technology has to be used to further the spread of education so that more people, regardless of their physical location, could have accesses to resources that were probably not accessible before. When we hear the term "digital education", the first related means that comes to mind are the Massive Open Online Courses (MOOCs) that have helped knowledge spread far and wide in such a vast way. Universities have put up their own, unique, specialized courses helping students all over the world to achieve expertise in various subject matters. Digital education, in India, has been on a massive growth spurt. Technology, being one of the strengths of India, with various technological giants like RELIANCE, BIRLA, TATA and more have contributed amply to the growth - a visible, significant sector being in the education sector. The digital report published by the Ministry of Human Resources and Development (MHRD), India brought out in June 2020, is a document attesting to the large number of initiatives the MHRD was supporting and involved in, attesting to the government's support in the post-pandemic transition from physical to online learning, making it more sustainable in the long run.

Sustainability in itself is a recently popularized term but it is also an immensely complex concept at the core of it. The most used definition of "sustainable development" would be that of the UN - the development benefiting the present generations without harming the prospects in the future, a kind of balance to ensure that both sides win, and reckless usage of resources is prohibited (Regents of the University of California, n.d.). The 2030 Agenda for Sustainable Development, coined by the United Nations and accepted by their member states in 2015, outlines the goals and hopeful achievements that the member states could carry through, making the world a better, more peaceful and improved place with all the simultaneous efforts (Department of Economic and Social Affairs, n.d.). Among these, climate change, sustainable cities and communities, conservation of life under the ocean, affordable and clean energy, gender equality and quality education are there. The SDG goal for quality education aims at important issues like, but not in the least limited to, making remote education accessible to the unfortunate people, decreasing the dropout rates in the world and proper sanitary measures for the primary schools (Department of Economic and Social Affairs). However, we are more concerned with SDG 4, the educational goal that aims to provide equitable and inclusive quality of education as well as promote opportunities to continue lifelong learning anywhere in the world (UNESCO, 2015). Sustainable education also takes the help of social justice and social equity to create generations of humans who would be socially inclusive and work to provide accessible education all around the world. Social justice has not been a defined term and especially in the field of education, it is particularly being more and more less recommended to use the term because of the different meanings the term calls for in different minds (Hytten&Bettez, 2011). Social justice, in essence, talks about being against the "wrong" causes in society but even in such a simple sentence, there could be so many meanings of the word, wrong. A cultural context is most prevalent here - what could be acceptable and right in the Indian society could very well be wrong in any other

society. Social justice in education, thus, has a wobbly foundation, making it entirely up to the academician to figure what the cause for social justice could be. However, according to the sustainable education definition in the UN, it would be most preferable to adopt a philosophical narrative that can be seen in the documents pertaining directly or indirectly to social justice in education (Hytten&Bettez, 2011). The philosophical lens of social justice talks about the fairness in the distribution of resources, ensuring equal opportunities for everyone through education, equality in the elemental dimensions related to education and more such persuasive arguments in the case for social justice in education (Hytten&Bettez, 2011). Social equity, on the other hand, gives a clearer definition as to what it stands for in the field of education. Social equity in education demands making sure that every person is armed with what they need to make a level playing field for everyone (Daisy, 2019). However, even with the overlapping of certain aspects, social equity must not be mistaken for social equality that states the need for equal opportunities. Though not so simple, equity and equality are analogous to the layman proverb - equality gives a man a fish, feeding him for a day but equity teaches the man to catch a fish making sure he never goes hungry again.

India has made notable progress when it comes to implementing quality and accessible education, pertaining to subcategories of Sustainable Education. Initiatives like SarvaSiksha Abhiyan (SSA), Right to Education (RTE), Education for All and more have pushed the Indian education system to become more inclusive and equitable than before. According to the Digital Report recently released, the Government of India has helped create online databases of knowledge like DRISHTI to help in disseminating e-journals and more resources online during the pandemic (Department of School Education and Literacy, 2020). RTE and other initiatives of the Indian government have made the enrollment rates go up significantly (Pandey, 2018). As mentioned before, one of the ways India is moving forward with inclusive and sustainable education is ICT (Information Communication and Technology) (Pandey, 2018). The use of ICT to create smart classrooms and through other mechanisms allows children even in rural areas to indulge in their studies creatively, as also mentioned in the before sections (Pandey, 2018). The Fundamental Right to Education has provided free and compulsory education in schools from the ages of six to fourteen years in India (Pandey, 2018). The newest draft of New Education Policy (NEP), 2020 has adopted a stance leaning towards development of critically decisive global citizens.

Before we go on to the analysis and discussion, the third lens that we will be seeing the post-pandemic Indian education system through is Global Citizenship Education (GCE). The definition of a global citizen being outlined by UNESCO's document on GCE is what will be used as this chapter's theoretical framework. The most common trait of being a global citizen would be, according to UNESCO, feeling a sense of belonging to the global community and a sense of responsibility to duties, on a global level (UNESCO, 2015). Attributes of a global citizen would include but wouldn't be limited to digital literacy, critical thinking, empathy, creative thinking and so on (UNESCO, 2015). UNESCO (2015) has divided global citizenship education into three categories - cognitive, socio-emotional and behavioural. The cognitive factor focuses on students acquiring the knowledge and understanding of local, regional and global issues (UNESCO, 2015). Cognitive skills encourage the growth of critical and analytical thinking that examines the relations between different countries and their individuals (UNESCO, 2015). Socio-emotional skills involve creating a more inclusive world by inculcating respect, tolerance and open-mindedness in people about different world cultures enabling a sense of belonging to the world on a global level (UNESCO, 2015). The behavioral skill set is mostly action oriented with its learning outcomes as acts of responsibility towards the environment, ethical actions and participating to make the world more sustainable (UNESCO, 2015). GCE talks mostly about the practicality of implementing such guidelines and its impact and usage by different stakeholders at different levels. GCE aims towards a holistic view of education, taking everyone into account - teachers, students, academic staff, stakeholders in the local level, stakeholders in the global and regional level and more. Some of the few implementation areas UNESCO delves into, in the GCE related document that it has released, are interaction of the community with the university, teacher training, quality assurance and so on (UNESCO, 2015).

Looking at the recently released New Education Policy of India, India has taken baby steps towards getting involved in the movement towards achieving GCE. The NEP explicitly mentions in one case, it'saimed to create global citizens (Ministry of Human Resource Development, Government of India, 2020). If we talk about indirect channels, the NEP emphasizes on competencies that are endorsed by UNESCO's GCE documents - empathy, critical thinking and digital literacy. Involvement with the local, indigenous communities are seen in the younger grades in the form of apprenticeships with local craftsmen and industry workers (Ministry of Human Resource Development, Government of India, 2020). Multilingualism and multiculturalism are seen to be in focus in the document. Why are we singling out the recent document, you ask? It is the first formal document that has been released by the Indian Government that speaks of attributes related to GCE. However, that is given since Global Citizen Education has only been formalized by UNESCO, very recently.

The Indian Scenario

Before we jump into the current Indian education landscape, it is important to note that India's population is mostly made up of the youth - As of the 2018 WENR (World Education News + Reviews), 600 million people were under the age of 25 and approximately 28% of the whole population was aged less than 14 (Trines, 208). The growth spurt of the youth population makes it very important for the country's education system to maintain quality as well as quantity. However, it seems that the education system does not keep much of its promises - 1.5 million engineering graduates are not the holders of quality jobs (Trines, 208). The lack of quality jobs in every field could be a motivator for Indian students to pursue their higher education abroad like in the States, UK and more. Till 2018, 70% of Indian students were studying in STEM fields in the USA - an attempt for them to bring an edge when they travel back to their country for jobs which would be quite an effective highlight in their resume (Trines, 208). However, India's top institutions are extremely competitive - the admission rate at government funded Indian Institute of Technology (IITs) is 2% while institutions like Christian Medical College saw 0.25% of applicants in 2015 (Trines, 208). The real cutthroat competition is seen in examples like 3,74,520 students vying for 800 available seats in MBBS programs at All India Institute of Medical Sciences (AIIMS) in 2018 (Trines, 208). Seeing on the other side of the coin of mobility, India has not been a favourable destination for international students. More initiatives like Study in India are being taken to improve the attractiveness of the country - Study in India is aiming to attract 200,000 students by 2023 from African countries, Saudi Arabia, Kazakhstan, China, Thailand, Vietnam, Malaysia and other countries (Trines, 208). An initiative worth noting for this chapter, would be the already ongoing National Institute of Open Schooling or NIOS that works specifically to provide education to underserved populations in remote areas in two motes - distance learning and physical classroom interactions (Trines, 208). Education is provided by government schools as well as state-run schools in the country. Privatization has also entered into the mix with many private higher education institutions coming up.

Post-Pandemic Indian Education System

This section will outline the challenges and opportunities that have been faced by the many stakeholders in the Indian education system, especially the students and teachers. However, before jumping into the same, let us take a moment to see how sustainability or rather sustainable education has been pushed through the New Education Policy, 2020. The education policy intersects in many areas with the SDGs and more so, the SDG 4 (Quality Education). Corresponding to SDG 4.2 that focuses on equal access to quality education in the pre-primary section, NEP has given special attention to education for three to six years of age. With the special emphasis comes a much-needed boost for the forebearers of Anganwadi (courtyard shelter), childcare centres set up in rural India. Corresponding to SDG 4.3 or equal access to affordable technical and vocational education, NEP talks about vocational education being provided from a younger age. Technical skills to improve digital literacy like coding will also be imparted from sixth standard and so on. The Ministry of Human Resources Development (MHRD), India is setting up a National Education Technology Forum to address issues of technology, knowledge sharing and capacity development. Corresponding to SDG 4.4 that encourages more people to learn relevant

skills for financial success, the NEP has shifted from a 10+2 module to following a 5+3+3+4 structure (5 years in pre-primary education, 3 years in primary education, 3 years in secondary education and 4 years in higher education). This model structure cleared out well-defined benchmarks to be set so that could lead to better outcomes. Additionally, the document provides multiple exit points for higher education which could set up better indicators to gauge the ability of the students in a better manner. Corresponding to SDG 4.5 or Attempting to eliminate discrimination from education, NEP has proposed a new body to address issues based on Internet-based e-learning, digital learning, technological infrastructure and capacity building. There is also a provision for a new Gender Inclusion Fund which makes schooling and support for disability schooling also proactive. SDG 4.6 that corresponds to Universal Literacy and Numeracy, an initiative has been set up in the NEP called a National Foundation of Literacy and Numeracy, to impart literacy and numeracy skills to every child up to third grade. The setting up of this foundation comes just in time as India has embarked on the journey to participate in the PISA survey which tests basic comprehension skills of English and Mathematics. Corresponding to SDG 4.7 or ensuring that all learners acquire skills relevant to sustainable development, the NEP has covered promotion of culture, peace and global citizenship, appreciation of cultural diversity through concentrating on the holistic growth of students by promoting creative and critical thinking, empathy and decision-making abilities.

From The Student's Eyes

Due to the yet developing nature of the country where the rural population does not have access to technology the same way a city dweller would, technical difficulties are rampant, disrupting a smooth flow of learning as India shifted to online education. The access to proper Internet connections variesstatewide, in India. In Kerala, 51% of households in the rural areas have access to the Internet through outside sources, 23% have access to the Internet in their homes (Mukhopadhayay, 2020). Another example would be Andhra Pradesh where 30% rural households have access to the Internet but only 2% are likely to have access at home (Mukhopadhayay, 2020). Look at the stark difference - this number indicates that even though there is access, it is not necessary that the access will be open to everyone. Giving another example of states that have their fair share of migrant students like West Bengal and Bihar, 7 to 8% only get access to the Internet, an almost negligible number when it comes to the entire population of the states. (Mukhopadhayay, 2020) A brighter scenario is seen in urban India where differences in the access of Internet are less dire with 18% and 21% of households in urban Bengal and Bihar accessing the Internet at home (Mukhopadhayay, 2020). However, let us make it clear, access does not necessarily mean that it will be continuous. Especially during the rainy season, due to the torrential rains especially in the coastal areas, power cuts could very well occur making it difficult for accessing the Internet. This is just one example. Therefore, technical difficulties not only include issues in access but also other continuity issues spilling over into other areas of a student's life.

In the wake of travel restrictions due to the pandemic, there has been a shift in the choice of studies for the Indian students. Even though the percentage has not dwindled in the total number of students expressing their desire to study abroad i.e., 91%, the choices for the destination countries have started changing (Live Mint, 2020). Before the COVID-19 hit, Indian students were mostly attracted to Canada, USA, UK and Australia with the USA bringing in the most amount of Indian international students (Live Mint, 2020). Now, the top choices for Indian students range from South Korea, Germany, Ireland, New Zealand, Singapore (Live Mint, 2020). Notice the increment of university choices shifting to Asian countries. According to a survey done by iSchoolConnect, it seems that due to the easy admission processes and a whole lot of choices when it comes to the course modules are the main factors for the change of choices (Live Mint, 2020).

While we are talking about mobility, let us consider another factor. Mobility has differed between disciplines. It has not remained the same for non-STEM (Science, Technology, Engineering and Mathematics while it remains almost similar in STEM courses. In fact, the appeal for STEM courses have been somewhat on the rise due to the rise in need of professionals working in the scientific fields, keeping in mind that they would tangibly contribute more to a pandemic (Sharma, 2020). Moreover, the

prospects of stayback and getting employed coupled with the lower ROIs on their study plans have forced almost 51 non-STEM students to put a halt in their plans of going abroad (Sharma, 2020). It would be interesting to notice from this pattern that essentially travel abroad for Indian students meant a way to help in their employability. This would explain the employability sceptic attitudes in non-STEM students with a knowledge-based course curriculum mostly while the technical, relevant skill-based curriculum of STEM students would definitely make their graduates ready to plunge into the industry, even in the middle of a pandemic.

A unique challenge in the Indian context would be the close-spaced environment that a student has to sit in, during his or her classes. Due to the relatively small apartments in most cases and more people than usual staying in them, the home becomes chaotic with shouting and yelling going on, which is not deemed appropriate for a student to study. Especially in the rural areas, where there are noises in the background most of the time, the student has to keep his or her audio and video off and cannot even hear the teacher properly, amongst the disturbance. If we see this from the point of view of the teacher on the other side of the screen, the teacher would just be talking to a bunch of 'tiles' - he or she would have no idea how much the students understood and there comes the gap between the understanding of the students and teachers. These simple challenges of a learning environment, a basic necessity for a student's growth and development, were very visible and acted as blocks in Indian education.

While the above sections have talked about a more external point of view, this paragraph will talk about the mental health challenges Indian students faced during this pandemic. Mental health was most affected, in the case of everyone, in this sudden emergency that the world was going through. Less to no physical activity as such, a disruption in sleeping patterns, more screen time, lack of physical contact with friends, family and loved ones were all factors that led to a deterioration in mental health in Indian children (Khattar et al., 2020). Due to the long periods at home without going to play with their friends outside, Indian children have become more irritable, bored, anxious, stressed, depressed and suffered other negative emotions (Parenting Desk, 2020). Why should it not be? School is an essential part of a child's life which teaches them many important cognitive abilities which were suddenly cut off during COVID. Due to the lockdown period, it would also be interesting to see if for children, the pandemic has made them an introvert or was it the other way round i.e., introverts and extroverts handled the pandemic differently (Parenting Desk, 2020).

When it comes to the higher education sector in India, according to a survey done of BML Munjal University students, mental health was badly affected in college going students (Indian Education Diary Bureau, 2021). While one university cannot summarise the views of the whole Indian college-going population, it could be taken as a starting point to gain a sneak peek into what struggles college graduates were going through. The survey stated that going through the pandemic taught the students to understand how important good mental health was (Indian Education Diary Bureau, 2021). This shows how much of the mental health dialogue is still unexplored in India and how much there needs to be a steady dialogue as well as awareness in the society. 23% of the students realised how important family and friends are in their life (Indian Education Diary Bureau, 2021). Humans being social animals and among them, college going people being the most social, the main dampening factors for the decrease in quality mental health would be stress, loneliness, coping up with unexpected news every day, fear and anxiety (Indian Education Diary Bureau, 2021). The students who had just joined in their first years of their courses were more scared than their higher-level peers who had already had a chance to interact in person with their classmates. Vivek, a student from Calcutta University, talks about how joining a new course in a new institution without physically interacting with his classmates was difficult for him. Physical hangouts were relegated to 30-minute slots of Zoom meetings and few people were actually interested in connecting with the class outside of formal settings. Students were only in contact with their immediate family mostly, affecting their overall cognitive development.This would, ofcourse, not stay restricted only to college students. It was being experienced by people all over the society, regardless of their profession or class or status.

COVID-19 put gender disparity into focus in the Indian education system. It all starts in the Indian home. Parents of some girls do not believe in education being a major part of growth in a girl's life with the opinion that if marriage and homemaking was the only option for girls, what use does education have in her life? Households in urban areas and cities in India have improved their mindset with leaps and bounds, being more in contact with globalization. However, the rural areas have not had so much luck. The disparity between the male and female enrolled students while calculating the Gross Enrollment Ratio in the Indian higher education system is evident (Thorat, 2006).

Out of the vast number of colleges present in India, only 10.82% is completely dedicated for female students in India (All India Survey on Higher Education (AISHE) 2018-2019, 2019). As the qualification goes higher, the enrolment for the female populations grows lower - female students studying Diploma, PG Diploma, Postgraduate, Undergraduate, and PhDs are lower in number than their male counterparts (All India Survey on Higher Education (AISHE) 2018-2019, 2019).

Marginalization occurs when we see that within the category of women, we bring further minorities for example women belonging to the rural areas (with lower economic status), scheduled castes, scheduled tribes, minority communities are less in number than those in the majority. As far as access is concerned, only 8.5% of females can use the Internet in the rural areas (Modi &Postaria, 2020). It is concerning how much of the female population is missing out on education because of skewed mindsets. Even with privileged females, we see that education is uninterrupted. Piling on education are household responsibilities, chores that she is expected to, even if she has assignments to submit and exams to prepare for. This is where we see the education of Indian women being at a disadvantage and it has only escalated due to the pandemic.

On a macro level if we want to see gender disparity, it will start with the vast urban-rural divide in India. The rural areas of India only have 60.53% of the colleges (All India Survey on Higher Education (AISHE) 2018-2019, 2019). The geographical location with their underdeveloped areas adds to the inequality making more developmental projects to be built up in the urban areas than the rural sections. Inadequacy in infrastructure sometimes including no proper classrooms leaves the students no choice but to move out. However, even that is not an easy decision as their contribution in the poverty-stricken households is important which makes some female students drop out of their higher education (Baisla,2020).

Sometimes, even the boys are restricted due to various reasons. Most of the issues in the rural institutions include (but most definitely not limited to) instructors without the proper skill set, lack of required resources, unwillingness to work in the areas by qualified and trained teachers and lack of equipment and infrastructure (Pawar, 2020). COVID-19 saw schools shutting down in the rural areas and for such a long time since they did not have the technical know-how to carry on learning online. On top of Internet access problems, there were not enough smartphones or laptops or technology to continue their education. However, in this case, the state governments have taken the beginning steps to remedy that by distributing free laptops or mobiles in the households. However, there is still a long way to go to bring the rural areas and the urban areas in par and provide them both equitable education.

From The Eyes of Other Stakeholders

The pandemic has caused as much adjustment problems for other stakeholders like teachers and parents as much as they have done to the students. Teachers who had been trained in a particular environment i.e., the classroom environment were having trouble navigating the waters of digital learning. Priya Vijaykumar Poojary, lecturer in Manipal Centre for European Studies, talked about how the challenge, as a teacher, was to get comfortable teaching in a move that she was not trained in. According to her, teachers were completely clueless as to how the different learning management systems would work and how the entire structure of a module had to be redesigned to accommodate online learning. Adding on to the troubles were technical glitches or access problems that hindered the teaching process. While the struggle was going on, there was also an excitement in the air, with teachers figuring out more innovative forms of teaching an assessment to add value and creativity to the classroom learning experience, as said by Pranjali Kirloskar, Lecturer and International Coordinator, Manipal Centre for

European Studies, Manipal. A module that could be creatively redesigned was language courses. The use of apps to organize games and make the course more interactive helped make language courses retain the interest levels of the participants. Language courses also had the help of movies and TV series in OTT platforms to keep their students engaged in keeping up with their learning (Roy & Das, 2021).

A major decision teacher had to take for the continuation of teaching and learning was choosing which platform to conduct their classes on. There was a myriad of options from Zoom, WebEx, Microsoft Teams and more. Facilitators had to keep in mind factors like robust management systems, less student distractions, how dependent the virtual classroom was on the continuous Internet connection and so on (Mathivanan et al., 2021). Google Meets and Microsoft Teams used a whole host of resources that made it easy for the teachers to organize classes, give assignments, and do other academia related tasks (Mathivanan et al., 2021). Social media serves as an important platform for dissemination of information from stakeholder to stakeholder for example we have seen Whatsapp being a common mode of communication between schools and parents in India (Mathivanan et al., 2021). Other social media platforms like Twitter, Instagram, Pinterest and more have had their fair share of usage as discussion platforms, allowing more interactive mode among the parents, students, and university (Mathivanan et al., 2021).

Universities were hit hard as without the proper funding; they could not maintain their teachers and other resources. The salaries of teaching and non-teaching staff were reduced to half and some had not even been paid for quite some time (Apoorvanand, 2021). In the beginning of the nationwide lockdown, universities had shut down, allowing their students some days to go back to their hometown since the university would not be functional (Apoorvanand, 2021). There seems to be a disconnect among universities who had completely shut down and the outside community, which raises the question of how much involvement with the community is the university actually doing. People question the role of universities who have not offered their campuses to be made use in some way, shape or form to help in the pandemic (Apoorvanand, 2021). However, even under those accusations, Indian HEIs have been doing their best to disseminate information regarding COVID-19 and keeping education continuous with virtual webinars and online classes. Association of Indian Universities (AIU) has stepped up in an admirable way to help its member universities function in a proper way. AIU has helped in facilitating development programs for the faculty regarding the online platforms, teaching, helping to conduct webinars in the local and international level, and conducting online workshops to impart skills relevant to the pandemic (O. P. Jindal Global University, 2020). Their most known initiative has been one in collaboration with the O.P. Jindal Global - a Response Toolkit for Indian Higher Education Institutions (O. P. Jindal Global University, 2020). The toolkit outlines a set of guidelines that universities could follow to ensure their studies are being continued as smoothly as possible and measures they could take to reopen their campuses as soon as it is allowed (O. P. Jindal Global University, 2020).

Conclusions

Digital Learning in India is at a transformative phase, especially after learning shifted from the physical to the digital platform. Global head of TCS iON, Venguswamy Ramaswamy, in his interview with Economic Times, India talked about the promising growth of digital learning in India. TCS iON specializes in customising technological solutions for different government and private institutions, be it grading systems or assessment patterns, quizzes, recruitment on a large scale like nation-wide and many more (ETGovernment, 2020). The best resource that TCS (Tata Consultancy Services) has built up is the TCS iON Digital Learning Hub which can be accessed free by any student under their collaboration with the Telangana State Council of Higher Education (TSCHE) (ETGovernment, 2020). The Digital Learning Hub has quite a number of courses that will help the students of the state achieve employability attributes according to the current industry scenario (ETGovernment, 2020).TCSiON also has various certification courses, internships and a digital database of talented professionals and students so that they can have a platform to expose themselves to national and international recruiters (ETGovernment, 2020). Seeing the progress of the pandemic in India, more and more students are getting used to online learning and are even taking advantage of the time they spend in their homes by

taking up certification courses of their interest or specialization. More and more students are finally figuring out a way to stay connected to their friends and family and make the best of every interaction as well as use the resources given to them in a worthwhile manner. EdTech industries are getting a push to come up with their own innovative solutions, bringing students, teachers, and universities together in an affordable way.

That being said, there are ample arguments where people have been sceptical about Digital Learning in India, saying that it would not work for an Indian audience. The infrastructure that is needed to properly promote digital education has to be there and it is still not fully established in all parts of India (Pitroda, 2020). Most of the rural population are not wholly aware of how the technology works and other basic digital literacy skills that should be there for every individual handling an electronic gadget. The same goes for older teachers who have spent their entire life teaching on a blackboard, who feel so disconnected from students when they are talking to a bunch of boxes instead of gauging their reactions through their body language (Pitroda, 2020). They have no training whatsoever with the online platform - be it using their cellphones or any other electronic gadget. And it is not only applicable to teachers but the old and graying population in all the Indian states - those in the urban areas do not have a handle on using the gadgets so how can we even expect the rural older population to handle it? Then there come the economic factors - how would the teachers get paid without students not enrolling or how much would their salaries get cut since the physical cost is not there anymore (Pitroda, 2020). There comes access issues where technical difficulties rule among others including the uninterrupted connectivity issues, handling of technical glitches, and more such errors (Pitroda, 2020).

There are pros and cons, some things that are going right and some things wrong when we talk about sustainable education in India and the spread of GCE in India. The rise in online learning has certainly helped in the accessibility of courses, specific to particular countries that could give a different cultural experience in learning. Online learning enables more students to get involved in virtual mobility, students who could not have travelled abroad due to various reasons. Online learning has shown its cracks when the degree of learning is varied according to the gender of the user or the economic class of a user. It has given an exit point or rather an excuse to children in rural areas to not attend school. However, there is still a promising future for digital learning and sustainable education in India that is carved by the NEP, 2020. The policy concentrates on imparting attributes like critical thinking and empathy to children from an earlier age so that they can be self-sufficient when it comes to decision making, research and sustainable and ethical actions towards the world and the environment. NEP has emphasized on the need for vocational education where students from the sixth grade will get the chance to interact with various industry professionals and take up small projects to help them open up to the many career possibilities that they could take up later in their lives (India Today Web Desk, 2020). The NEP has shown different ways that the structure of the education system could be changed to make it easier on the students, be it a curriculum redesign that involves a balance of local and international flavour or be it reaching out to the farthest corners of India to impart basic literacy and numeracy skills. Under-represented groups have also been talked about in the NEP like the tribal communities, disadvantaged people, and others with measures being taken to slowly remove the discrimination against them from education. The NEP has suggested a change of the assessment patterns following which a summative assessment will be replaced by regular formative assessments, a way to gauge the growth of the student in a holistic way (India Today Web Desk, 2020). The direct mention of the phrase, 'global citizens', and the indirect emphases on the competencies outlined by UNESCO attests to this chapter's argument - In spite of the long way to go, India has begun to disseminate the concept of sustainable education and global citizenship through its documents. Now it is all up to the involvement of the citizens and all other stakeholders included to contribute to the implementation and progress of India, in this area.

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