Chapter 8
The New Normal of the Education System: Issues of Rights and Sustainability in Pandemic Trapped India

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Abstract Education is the guiding light to development, climbing up the social ladder, and having perspectives about how the world can change for good. With time people on earth have felt the need for education, emphasizing education as a right and considering it a Sustainable Development Goal. This paper explores how the COVID-19 pandemic has come as a blow to the education system and sector; the rights, Sustainable goals are being jeopardized due to the sudden closure of the educational institutions and shift in teaching methods from paper to digital. All three education sectors, primary, secondary, and tertiary, are severely affected by the pandemic. While the government had started stressing on the quality of education, the access once again has been put into question. There are a revisiting and framing of new initiatives by India’s government to take up digital measures of education for the students. While the future of education and students in India still remain unclear with examinations getting canceled and new academic calendars are being prepared and relooked at, the concern is about the changes that shall come in the education post-pandemic to build better.

Keywords Pandemic · Human rights · Sustainability · Education · Government schemes · Digital learning

8.1 Introduction

The world is vigorously affected by the pandemic outbreak of COVID-19. It has led to disruption in human activities and the basic needs of the population in the world. The traces and spread of the pandemic have first been noticed in Wuhan, Central China’s Hubei Province, late in 2019, post which the whole world came under the grasp of the virus. The human-centric socio-economic environments have been witnessing almost complete standstill around the world, leading to a crisis for
the human resource. The education sector has been hard hit by the pandemic as most of the countries have decided to keep the educational institutes shut to avoid the disease being spread among young children and adults.

The shreds of evidence from history make it clear that the closure of educational institutions is often considered as the first non-pharmaceutical intervention for the implementation in a pandemic, as students are effective ‘agents’ in spreading the malicious virus. Timely closure of schools and the cancellation of public gatherings was significantly associated with reduced mortality related to influenza epidemics during the 1918 influenza epidemic in the United States (Chen et al. 2011). More than 1300 public, charter, and private schools in 240 communities across the United States were closed during the spring wave\(^1\) of the 2009 (H1N1) pandemic (Navarro et al. 2016).

United Nations Educational, Scientific, and Cultural Organisation (UNESCO 2020a) estimated that 107 countries have temporarily closed their educational institutions nationwide, impacting over 861.7 million children and youth, i.e., 90% of the world’s student population.\(^2\) The Government in India, like most of the governments worldwide, has decided on temporary shutdown of the Educational Institutions as a precautionary attempt to prevent the spread of Covid-19.

However, the closure of educational institutes as a part of safety measures severely compromises the ethics of social equality. The article by Cauchemez et al. (2009) points out that school closure raises a range of ethical and social issues, particularly since families from underprivileged backgrounds are likely to be disproportionately affected by this intervention. The pace of development for certain groups of people has been low, and the pandemic acts as the catalyst to magnify the pre-existing constraints of development.

Prior to the onset of COVID-19, youth (aged 15–24) were already three times more likely to be unemployed compared to adults, while 126 million young workers were in extreme and moderate poverty worldwide (UNDESA 2020; International Labour Organization 2020). The governments have deployed measures for learning to continue through digital/online platforms, like television and radio: a most far-reaching experiment in the history of the education system (Giannini et al. 2020). The problem is, however, farfetched in terms of access to these virtual lessons. The young population, being kept away from their spaces of learning, can make the step and advances toward the Agenda 2030\(^3\) take a back seat with stagnation in achieving a sustainable future. This chapter takes the discussion into three sections. The first section focuses on the relationship between education, sustainability, and rights. The second section brings forth the Indian context on ways the pandemic has changed the

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\(^1\)The United States experienced its first wave of 2009 H1N1 pandemic activity in the spring of 2009, followed by a second wave of 2009 H1N1 activity in the fall. The first wave of the H1N1 was known as the ‘spring wave’.

\(^2\)Mentioned in UNESCO’s Initiative Against COVID-19 (https://en.unesco.org/sites/default/files/no_teacher_or_student_should_be_left_behind.pdf).

\(^3\)The 2030 Agenda announces a “plan of action for the people, planet and prosperity.” It highlights strengthening “universal peace in larger freedom,” and recognizes eradicating poverty in all its forms and dimensions.
country’s education system, and the third deals with the issues of rights, sustainability, and their violation during the pandemic and highlights the measures that shall be the deciders of a new normal\footnote{A new normal is a state, following a crisis, to which an economic or social system settles. It differs from the situation that prevailed prior to the start of the crisis. The term has been used frequently in literature relating to the financial crisis of 2007–2008, the aftermath of the 2008–2012 global recession, and now, during the COVID-19 pandemic.} after the pandemic ends.

## 8.2 Rights, Sustainable Development, and Education

Rights are fundamental to civilization entitled to all beings. Humans acquire their right by virtue of birth irrespective of their biological, national, social, cultural, and any other identities. Human Rights are norms or descriptions of certain moral human behavior void of discrimination, Universal, and Egalitarian in nature. The rights enshrined in the Universal Declaration of Human Rights (UDHR) are all interdependent for their successful conferment, as is mentioned in both the treaties—the International Covenant on Civil and Political Rights (ICCPR) and International Covenant of Economic, Social and Cultural Rights (ICESCR), 1966:

> The ideal of free human beings enjoying civil and political freedom and freedom from fear and want can only be achieved if conditions are created whereby everyone may enjoy his civil and political rights, as well as his economic and cultural rights.

The UDHR was formulated in 1948. Whereas ‘Our Common Future’ of the Brundtland Commission in 1987 set the cornerstone of sustainable development. Framed as principles for human development, taking into account the sustenance and balance between natural resources and man for the future, the concept of sustainable development was established as:

> (the) development that meets the needs of the present without compromising that ability of the future generation to meet their own needs. (World Commission on Environment and Development 1987)

With the advancement of time, human civilization has progressed in technological know-how and innovation. Human rights violation remains a prevalent issue in most of the developing country, and there is an ever-increasing gap between the rich and the poor. A large proportion of the world’s population remains illiterate, and children still live in poverty, challenging one of the key concepts of sustainable development, i.e., ‘providing essential needs to the world’s poor through overriding priority’ (Shaker 2015). The main target of sustainable development would be attaining equity between the present and the future generation that is to be regarded with the basic needs for a quality life. It refers to the pathways and processes that help achieve sustainability, which is the long-term process that establishes a sustainable global world. However, the documented existence of the rights and the views on a better future remains unfamiliar among a huge section of the world population, which can be overcome by education.
8.2.1 Human Rights and Sustainable Development Goal

Human exists on the earth by virtue of their interlinking to one another, as well as with their physical, social, and cultural surroundings. The very existence and implementation of human rights create conditions essential for sustainable development. Development can be a key to change in human existence and welfare when the rights are protected and helps modulate the social, economic, cultural, political, and civic well-being of the population and individual. The process of development, however, requires the free and active participation of all individuals. Nobel laureate Professor Amartya Sen (1999) defines development as freedom, which is both the primary objective of development and the principal means of development. In order to achieve this ‘freedom,’ the human world requires to be free from all kinds of discrimination that is guaranteed by rights granted. As humans are the harbingers of change, the Right to Development forms their basis of linkage between rights and development. Article 1 of the Declaration of Right to Development states:

The right to development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realized. (Declaration on the Right to Development 1986)

There has been a constant emphasis on the recognition of human rights essential for achieving sustainable development.

The Millennium Development Goals (MDGs)\(^5\) have acted as a stand-in for certain economic and social rights, but overlook other human rights linkages. Despite significant improvements in increasing primary school enrolment in some regions, the Millennium Development Goal of achieving universal primary level education by 2015 could not be achieved. The 2030 Agenda for Sustainable Development was adopted in 2015, provides a plan of a peaceful and prosperous world. The 17 Sustainable Development Goals (SDGs\(^5\)) recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth (United Nations 2015). The SDGs laid down in Agenda 2030 are inclusive, comprehensive, and ‘unequivocally anchored’ (Office of the High Commissioner for Human Rights 2015) in human rights marking a paradigm shift toward a more balanced sustainable development aiming at equality and non-discrimination. Like the universal nature of human rights, Agenda 2030 is also universal, applicable to all without any form of discrimination. Although the SDGs themselves are not framed explicitly in the language of human rights, most targets explicitly reflect the content of corresponding human rights standards. The SDGs address availability, accessibility, affordability, and quality of education, health, water, and other services related to those rights.

\(^5\)At the beginning of the new millennium, world leaders gathered at the United Nations to shape a broad vision to fight poverty in its many dimensions. That vision, which was translated into eight Millennium Development Goals (MDGs), has remained the overarching development framework for the world for the past 15 years (2000–2015).
8.2.1.1 Importance of Right to Education (RTE)

While the world captured by the virus, understanding and implementing human rights is the most vital and crucial for the upliftment of human life; as UN Secretary-General António Guterres in his brief on COVID-19 and Human Rights (United Nations 2020a) says,

The virus threatens everyone. Human rights uplift everyone. By respecting human rights in this time of crisis, we will build more effective and inclusive solutions for the emergency of today and the recovery for tomorrow.

Education is the pathway to an aware and a liberated world, leading to social change and a much-developed world. Education as a human right has made its place in Article 26 of the UDHR, 1948, which states that:

Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available, and higher education shall be equally accessible to all on the basis of merit. (Universal Declaration of Human Rights 1948)

As defined by General Comment No. 13 of the United Nations Committee on Economic, Social and Cultural Rights (UNCESCR), education is both a human right in itself and an indispensable means of realizing other human rights. As an empowerment right, education is the primary vehicle by which economically and socially marginalized adults and children can lift themselves out of poverty and obtain the means to participate fully in their communities. The importance of education is not just practical: a well-educated, enlightened and active mind, able to wander freely and widely, is one of the joys and rewards of human existence. (UN Economic and Social Council 1999)

On the other hand, the International Covenant on Economic, Social, and Cultural Rights (ICESCR) identifies the ‘Right to Education’ under article 13 and states that:

The States Parties to the present Covenant recognize the right of everyone to education. They agree that education shall be directed to the full development of the human personality and the sense of its dignity, and shall strengthen the respect for human rights and fundamental freedoms. They further agree that education shall enable all persons to participate effectively in a free society, promote understanding, tolerance and friendship among all nations and all racial, ethnic or religious groups, and further the activities of the United Nations for the maintenance of peace. (International Covenant on Economic, Social and Cultural Rights 1966)

The treaty also finds mention of all forms of education, be it primary, secondary, and higher education, to be accessible to all. Human rights and education during the global crisis can be aligned with one another. While the rights and the rule of law exist for the protection of mankind, education could be the most important and key component to defend the rights that are the very subject, finds mention in an article published by UNESCO:

Education is a key ally in defending rights and protecting the rule of law and is an essential life skill in crises. (Giannini and Brandolino 2020)

6UNCESCR is the body in charge of monitoring the implementation of the International Covenant on Economic, Social and Cultural Rights in the States which are party to it.
8.2.1.2 Education as a Sustainable Development Goal

Education becomes the key to achieve all other Sustainable Development Goals. There is believed to exist a positive relationship between education, socio-economic, and environmental protection. Education is both a means and an end, having a domino effect of triggering the intertwining realization and enjoyment of other human rights, which is a crucial and differential factor for sustainable human development. Learning and development are at the very core of the human experience and existence, both at the individual and collective levels. Evidently, the process of learning and the process of development are two interdependent and interrelated processes and concepts (Savić 2018). Education must be both inclusive and non-discriminatory to avoid the exclusion of some groups from mainstream society—ideally one that tolerates diversity. The lack of education is in itself a dimension to poverty.

Education does influence the growth and reduction of poverty levels in developing countries. Study shows that an increase in the ‘years of schooling among adult’ (15 years old and over) by two years throughout 1965–2010, helped to lift nearly 60 million people out of poverty (UIS and GEM 2017). The proposed Sustainable Development Goal 4 reads, ‘Ensure inclusive and equitable quality education and promote life-long learning opportunities for all.’ Like inclusive quality education, human development in a sustainable manner is also a human right. Discrimination in human society is still prevalent in the global world that leads to a structured inequality and a segregated society. Education, however, is a fundamental right that can ensure sustainability for the present and the future generation as the impact is long term with a positive impact on the other factors crucial for human development. Education can prevent transmission of poverty between generations, the utmost level of sustainability. Education, being the forerunner of development, inclusiveness, and quality are not sufficient enough. Availability, accessibility, adaptability, and acceptability also form the basis of acquiring education.

In 2019, the UN General Assembly recognized Education for Sustainable Development (ESD) as a model for rethinking the learning to achieve the Sustainable Development Goals. ESD reassesses what we learn, where we learn, and how we learn. It develops the knowledge, skills, values, and attitudes that enable learners to make informed decisions and actions on global problems such as the climate crisis. It empowers learners of all ages to change the way they think and work toward a sustainable future (Giannini 2020). UNESCO is to come up with an initiative called ‘the future of education,’ which aims to rethink education and reshape the future. The initiative is catalyzing a global debate on how knowledge, education, and learning need to be reimagined in a world of increasing complexity, uncertainty, and precarity. The commission declares knowledge as the most significant renewable resource of humankind to respond to challenges. On this basis, it is sensible to rethink education regarding how inclusive the world can be in building on education for the betterment of humankind and the planet. UNESCO, in its work ‘From Green Economies to Green Societies’ has pinpointed the vital role education plays in bringing about change in societies:
Education is a fundamental lever of change contributing to poverty eradication, sustainable development, equity, and inclusiveness. It is also a means of realizing broader social, economic, political, and cultural benefits. It empowers all people of all ages with the knowledge, skills, and confidence they need to shape a better future. (UNESCO 2011)

In green societies, education needs to be grounded on the values of peace, non-discrimination, equality, justice, nonviolence, tolerance, and respect for human dignity. Quality education must be manifested on a human rights-based approach so that human rights are implemented throughout the whole education system and in all learning environments (UNESCO 2011).

8.2.2 SDG 4 and Related Human Rights Issues During a Pandemic

Guaranteeing human rights for everyone poses a challenge for every country around the world to a differing degree. The public health crisis is fast becoming an economic and social crisis, and a protection and human rights crisis rolled into one. The COVID-19 crisis has exacerbated the vulnerability of the least protected in society. It is highlighting deep economic and social inequalities and inadequate health and social protection systems that require urgent attention as part of the public health response. Women and men, children, youth and older persons, refugees and migrants, the poor, people with disabilities, persons in detention, minorities, LGBTI people, among others, are all being affected differently (United Nations 2020a). As mentioned in Table 8.1, the violation of rights leads to a disruption in achieving sustainability, and the SDGs’ are grounded on human rights. The pandemic has put to trial the strength of rights and sustainable goals.7

António Guterres, UN Secretary General, in the High-Level Political Platform (HLPF) 2020, outlines an overarching theme of ‘reducing inequality, by making economies more sustainable and just’ which shall be the key strategy to reduce global poverty. Progress toward reduction has slowed in recent years, and it is projected that in 2020 alone, the pandemic could lead to up to 49 million people falling into poverty (UN News 2020). At the end of 2019, millions of children and young people were still out of school, and more than half of those in school was not meeting minimum proficiency standards in reading and numeracy. The closure of schools to slow the spread of COVID-19 readily carries an adverse impact on learning outcomes and the social and behavioral development of children and young people. It has affected more than 90% of the world’s student population, 1.5 billion children, and young people. Although remote learning is provided to many students, children and young people in vulnerable and disadvantaged communities, such as those living in remote areas, extreme poverty, fragile states, and refugee camps, do not have the same access to that. The digital divide will widen existing gaps in inequality concerning education (UNECOSOC 2020).

7See the website of the United Nations: https://www.un.org/sustainabledevelopment/education/.
Table 8.1  SDG 4 and human rights violations during the pandemic

| Sustainable development goal 4<sup>a</sup> | Related human rights that will be violated due to the pandemic<sup>b</sup> |
|-------------------------------------------|---------------------------------------------------------------------|
| Ensure inclusive and equitable quality education and promote life-long learning opportunities for all | - Right to education (UDHR art. 26; ICESCR art. 13), particularly in relation to children [Convention on Child Right (CRC) arts. 28, 29]; persons with disabilities [CRC art. 23(3), Convention in the Rights of Persons with Disabilities (CRPD) art. 24]; and indigenous peoples [United Nations Declaration on the Rights of Indigenous People (UNDRIP) art. 14] |
| • Targets of SDG 4 | - Equal rights of women and girls in the field of education [Convention on the Elimination of all forms of Discrimination against Women (CEDAW) art. 10] |
| Targets include universal access to free, quality pre-primary, primary and secondary education; improving vocational skills; equal access to education; expanding education facilities, scholarships, and training of teachers. | - Right to work, including technical, and vocational training [ICESCR art. 6] |
| • Threatened Targets of SDG 4 due to the pandemic | - International cooperation [UDHR art. 28; Declaration on the Right to Development (DRtD) arts. 3-4], particularly in relation to children [CRC arts. 23(4), 28(3)], persons with disabilities [CRPD art. 32], and indigenous peoples [UNDRIP art. 39] |
| Target 4.1 | |
| Target 4. 2 | |
| Target 4. 3 | |
| Target 4. 4 | |
| Target 4.5 | |
| Target 4.6 | |
| Target 4.7 | |
| Target 4.A | |

Data Source  
<sup>a</sup>United Nations Sustainable Development Goals  
<sup>b</sup>Various Human Rights conventions and declarations

The right to education could also be termed as an empowering right which has been put to a position by the pandemic to be violated. The pandemic magnifies the structured inequalities existing in society. The United Nations Development Programme (UNDP) estimates the ‘effective out-of-school rate’ due to school closure. The percentage of primary-school-age children is adjusted to reflect those without internet access. The report indicates that 60% of children are not getting an education, leading to lower the global educational attainment level which is not seen since the 1980s (UNDP 2020). According to RTE’s ‘State obligations and Responsibilities’, the states are obliged to ‘take positive measures that enable and assist individuals and communities to enjoy the right to education’ and provide the right ‘when an individual or group is unable to realize the right themselves by the means at their disposal’ in general.

However, the pandemic has changed the ideas with the virtual intrusions in education, remaining the only means the obligation of the state is curbed as it cannot provide each student with the digital toolkit required for education. The pandemic and the temporary closure of the educational institutes are likely to widen the already existing disparities in the society, limiting the long run to sustainability. According to UNESCO (2020c) data, 100 countries have not yet announced a date for schools to reopen; 65 have plans for partial or full reopening; while 32 will end the academic year online. For 890 million students, the school calendar has never been so undefined.
Keeping the young away from educational institutes could aggravate the educational inequalities, jeopardize the attainment of Sustainable Development Goal 4, and violate the right to education. To summarize, the role of the SDGs is greatly heightened by the pandemic as a trajectory to shape the future through education for sustainable development (ESD). Where schools and institutions of higher learning are at the receiving end as ‘victims’ of the viral attack, unable to cope up with the disruptions that they are facing. It goes back to the issue of cleanliness, hygiene, and sanitation—both mental and physical, an age-old precept that has fallen behind in the virtual world. In some places, the IT facilities are better kept than the toilets! Undoubtedly, the ethos of education must be revisited (Razak 2020). School closures in over 180 countries have laid bare inequalities in education, deficiencies in remote learning, the cost of the digital divide, as well as the important role schools play in student health and wellbeing (Giannini 2020). The pandemic has affected students’ learning efficacy on a global scale never encountered before.

### 8.3 The Indian Scenario

India, the second-largest country in the world by population (preceded by the People’s Republic of China), has been put to a state of inactivity due to the current pandemic since the end of March. The first case was reported during the end of January in Kerala, and by March, the numbers had surged. By 24 March 2020, the government of India had ordered a complete nationwide lockdown, and the country went to a standstill. Due to the sudden lockdown put to effect without proper policy measures and repeated prior warnings, there have been violations of rights. Though the country has taken to partial lockdowns and unlocking since mid-May in certain sectors of economic involvement, the education sector in India is still continuing from the ‘in home’ and ‘from home’ space. In India, with a huge demographic dividend, the future human resource, which is directly or indirectly associated with the education sector, has been pushed to a state of complete mayhem. The future of reopening the educational institutes, adhering to the norm of social distancing, still remains uncertain. The novel nature of the virus makes the return of the education sector a dubious affair and a matter of concern with a maximum of the young population staying away from education. The youth population (15–24 years) in India is nearly

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8 According to the World Population Prospects: The 2012 Revisions (https://population.un.org/wpp/Publications/Files/WPP2012_HIGHLIGHTS.pdf).

9 As has been reported by the World Health Organization (https://www.who.int/india/news/feature-stories/detail/responding-to-covid-19---learnings-from-kerala).

10 The UN Secretariat uses the terms youth and young people interchangeable to mean age 15–24 with the understanding that member states and other entities use different definitions (https://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf). According to World Health Organisation ‘Young people’ comprise the age group 10–24 years (https://www.who.int/southeastasia/health-topics/adolescent-health#:~:text=WHO%20defines%20‘Adolescents’%20as%20individuals,age%20range%2010%20to%2024%20years).
Table 8.2  Rural–urban distribution of educational institutes in India

| Location | Primary schools | Upper primary schools | Secondary schools | Higher secondary schools | Total |
|----------|-----------------|-----------------------|-------------------|-------------------------|-------|
| Rural    | 756336          | 136334                | 26877             | 5970                    | 1247492 |
| Urban    | 83903           | 11245                 | 7056              | 5467                    | 220184  |

Source U-DISE Flash Statistics 2016–2017

one fifth or 19.1% of the total population (Census of India 2011a), and, by the end of 2020, it is expected to be 34.43% of the total population. The high proportion of youth determines the potential growth of the nation, which is possible with proper exposure to education, training, and generation of employment for the youth in all sectors and geographies. Despite the recognized importance of the youth, the youth population remains underrepresented and impassive in the decision-making process of the country.

The holistic vision of National Youth Policy (NYP 2014) is ‘to empower the youth of the country to achieve their full potential, and through them enable India to find its rightful place in the community of nations.’ The pandemic has affected the whole nexus of the population associated with education, threatening the basic human rights and plugging the country’s target in achieving sustainability. The sudden shift on the actual prototype of face to face education has put parents, management bodies, and the stakeholders to take necessary steps to deal with the crumbling system and define ‘new normal’ in the education system. The country has more than 1.4 million schools, with over 227 million students enrolled and more than 36,000 higher education institutes. India has one of the largest higher education systems in the world (Jha and Shenoy 2016).

The discussion relating to the rural–urban representation is rational during the present situation, mostly in discussing the impact it has on education and the related population. The Census of India states that despite the decline in the rural population, 68.84% of people still live in villages in India, keeping only 31.16% in the urban areas, out of which 17.4% live in the urban slums (Census of India 2011b). The disparity in numbers also exists in the literacy rate, with 85% of the urban population being literate and only 68.9% in the rural. The total number of educational institutions are, however, more in the rural area, as shown in Table 8.2. There are 180 million students who are enrolled in rural schools at all levels, and only 71 million students in urban schools (U-DISE 2016). The rural schools have six million teacher representation, whereas two million teachers are working in urban schools. In the case of higher education, there is no clear distinction with Gross Enrolment Ratio (GER) as low as 26.3% (AISHE 2019) and the mobility of the participants in higher education the rural–urban factor remains confined to the location of the Higher Educational Institutes (HEI).

11The figures have been mentioned in Youth of India, 2017 a MoSPI Report, p 13 (http://mospi.nic.in/sites/default/files/publication_reports/Youth_in_India-2017.pdf).
The alteration in the mode of imparting education also requires consideration of digital access in the country. The rural internet density is 25.3, while the urban internet density is 97.9 (Parsheera 2019). The digital penetration in India remains segregated by various economic, societal, and geographic factors surmounting to digital exclusion. Whereas the ‘Digital India’ drive identifies universal access to wireless handset connectivity as one of its main pillars.

8.3.1 COVID-19 and the Indian Education System

India’s impetus to digital empowerment, using information and technology, is in the process of a full swing with the partial engagement of the education sector. The education system in India has been acquired by a physical space known as a pathshala, gurukula, school, college, or university with actual classroom space to be shared with the peer and teacher. Due to the pandemic Indian education system has faced a complete shift to synchronous and asynchronous modes of learning. According to a report by the UNESCO, UIS, and GEM, there were 49.8 million students already out of school in their Upper Secondary age in 2015 or the latest year; 2.9 million out of school population in the primary age; and 11.1 million in the lower secondary age in India (UIS and GEM 2017).

Nearly six months of complete disconnection with the educational spaces is not the only threat. The prioritization of curbing the spread of the virus among the young population caused the board examinations to terminate, regular classes to cease, the college examinations to being held online, and many entrance exams for professional institutes to put on hold. The sudden shift in the mode of taking lessons has put the students in a dilemma, involving the parents, teachers, and the management in the haul. When considering a fundamental change in the belief system and education of any country, it becomes obvious that this change requires a great deal of work in various fields. This might include areas such as teacher training, curriculum development, and of course, material development, among others (Mohammadnia and Moghadam 2019). The National Education Policy (NEP) of India, 2020 lays emphasis on ‘Early Childhood Care and Education as the foundation of learning.’ This means engaging students from 3 to 6 years of age, which shall be a huge challenge if the schools do not reopen. The invisible divide of public–private modes of education and the privileged-unprivileged divide has again become visible, which has been discussed at length in the later sections. The private-run schools are conducting online classes while most of the students in government schools are being left behind from the privileged peers. The emphasis on High-Quality Research and Liberal Higher Education laid down in NEP, 2020 could also be pushed back in time because of the sudden closure of the higher educational institutions.
8.3.1.1 Government Initiatives in Education During the Pandemic

The shift to remote learning has allowed the Indian government to promote and implement the digital programs that were to be a part of the education system in India in times to come, the initial foundations of which had been laid prior to the pandemic situation. As mentioned earlier about the youth of India, they are to reap the demographic dividend of the country. There were already the e-learning platforms and the Massive Open Online Courses (MOOCs) that had been launched by the government. Table 8.3 shows the existing initiative in pre-pandemic times. It allows flexible and personalized learning at the speed of the learner, and one can continuously augment and expand content through digital means. The rapid increase in internet penetration and various government initiatives such as the Digital India campaign has created a conducive environment for moving toward digital education (Ministry of Human Resource Development 2020). Despite the already existing Information and Communication Technology (ICT) initiative, the COVID-19 has posed as a threat and challenge to the existing ideas and plans for achieving goals in education. There is a need to promote critical thinking, creative and communication skills, along with experiential and joyful learning for the students focussing

| Nature of the programs          | Programs                                                                 |
|---------------------------------|---------------------------------------------------------------------------|
| Audio–video content             | • Study Webs of Active–Learning for Young Aspiring Minds (SWAYAM)          |
|                                 | • SWAYAMPRABHA                                                            |
|                                 | • Gyan Darshan                                                            |
|                                 | • Gyan Vani (105.6 FM Radio)                                             |
| Digital Content: Access journals and e-books | • National Digital Library (NDL)                                         |
|                                 | • e-Pathshala                                                             |
|                                 | • e-PG Pathshala                                                          |
|                                 | • e-SodhSindhu                                                            |
|                                 | • Sodhganga                                                              |
|                                 | • e-Gyan Kosh                                                            |
| Hands-on-Learning               | • Free/Libre and Open Source Software for Education (FOSSEE)             |
|                                 | • e-Yantra                                                                |
|                                 | • Virtual Labs                                                            |
|                                 | • Spoken Tutorials                                                        |
| Progress Tracking               | • Sodh Suddhi (PDS): Plagiarism Detection Software                       |
|                                 | • Indian Research Information Network System (IRINS)                      |
| Digital Infrastructure for Teachers | • DIKSHA                 |

Source Compiled by the author from mhrd.gov.in
on learning outcomes. The curriculum must be rooted in the Indian ethos and integrated with global skill requirements. Therefore, it has been decided to prepare a new National Curriculum and Pedagogical Framework for school education, teacher education, and early childhood stage to prepare students and future teachers as per global benchmarks.

The Finance Minister of India has laid stress on investing in human capital for the prosperity and productivity of the country, which is definitely a positive investment toward a better future. On this note, the HRD ministry has called for ‘One nation, one digital platform’ and ‘One Class One Channel’ for assuring quality education to every corner of the nation. The ministry is of the view that the measure shall usher in a new paradigm in the creation of a new India. The immediate set of the initiative is:

• A comprehensive initiative called PM e-VIDYA will be launched, which unifies all efforts related to digital/online/on-air education. This will enable multi-mode access to education, and includes: DIKSHA (one nation-one digital platform), which will now become the nation’s digital infrastructure for providing quality e-content in school education for all the states/UTs; TV (one class-one channel) where one dedicated channel per grade for each of the classes 1–12 will provide access to quality educational material: SWAYAM online courses in MOOCS format for school and higher education; IITPAL for IITJEE/NEET preparation; Air through Community radio and CBSE Shiksha Vani podcast; and study material for the differently abled developed on Digitally Accessible Information System (DAISY) and in sign language on NIOS website/YouTube. This will benefit nearly 25 crore school-going children across the country.

• In this time of the global pandemic, it is vital that we provide psychosocial support to students, teachers, and families for mental health and emotional wellbeing. The Manodarpan initiative is being launched to provide such support through a website, a toll-free helpline, national directory of counselors, interactive chat platform, etc. This initiative will benefit all school-going children in the country, along with their parents, teachers, and the community of stakeholders in school education.

• Government is expanding e-learning in higher education—by liberalizing open, distance, and online education regulatory framework. Top 100 universities will start online courses. Also, the online component in conventional Universities and Open Distance Learning (ODL) programs will also be raised from the present 20 to 40%. This will provide enhanced learning opportunities to nearly 3.7 crore students across different colleges and Universities.

In order to make e-learning more constructive, NCERT and Rotary India digitally signed MoU for e-learning content telecast for class 1–12 overall NCERT TV channels under Vidya Daan 2.0 Rotary International would provide the e-content in the Hindi language to NCERT for classes I to XII for all subjects. Along with this, Rotary International will provide material for special needs children as well as contribute its entirety to the Adult Literacy Mission. They will also provide the Teacher Training (including professional development) to reach our students through
radio and TV, where there is no internet or mobile connectivity available, and this MoU is a big step in that direction (Press Information Bureau 2020). E-learning resources are being prepared in eight regional languages. The study material for the differently abled is being developed on Digitally Accessible Information System (DAISY) and in sign language along with radio podcasts, especially for the visually and hearing-impaired students. Online and digital education is a trend being rapidly embraced for high-quality education on a large scale.

8.3.1.2 Digital Access and Divide in Education

The policymakers believe, despite setbacks and contrary evidence, that information technology (IT) will provide solutions for most of India’s development problems. This approach of ‘technological fix’ to an extraordinary humanitarian crisis, including the provision of education and health services through digital platforms, is likely to widen the inequality in accessing those services from all corners equally. The citizens in the ‘offline’ category will suffer the most in the changing and challenging times (Ahamed and Siddiqui 2020). The shift of base from the classroom teachings to online classroom deliveries put to question the pedagogies present in the present-day education system. Online lectures create a cognitive dissonance between teachers and students as course content is delivered through a medium where students often see only presentation slides with the lecturer’s camera switched off, and teachers see only an impersonal student name-tag without an interacting face. This ‘faceless’ classroom not only has the potential to exhaust the participants but more worryingly, it threatens to weaken the bond that students share with their teachers. This dilutes the incentive for both professors and students to connect with each other at a human level.12

Regarding the online education market, higher education contributes 59.7% of the market size, school education 38.1%, pre-school segment 1.6%, and technology and multi-media the remaining 0.6%. Many colleges do not have sufficient hardware or software to give students complete learning experience (Jha and Shenoy 2016). The massive disruption of activities due to the spread of COVID-19 has turned many schools to the remote learning centre to maintain the teaching–learning process amidst these troubled days. There is a lack of digital infrastructure for both the teachers and students and a disparity in internet connection and access to devices; while all students might have smartphones, not all of them own desktops or laptops which are more suited for educational purposes.13 The online classes made available are not in at par with the kind that would be viable for the children with special needs. Despite the government announcement of making PM e-Vidya available to the

12 Indian national daily newspaper The Statesman has published an article on different pedagogy during the COVID crisis, circulated on 13 July 2020 (https://www.thestatesman.com/opinion/a-different-pedagogy-1502908267.html).

13 Indian national daily newspaper, The Statesman has published an articles on the digital divide in education (https://www.thestatesman.com/opinion/digital-divide-indias-education-1502899472.html).
visual and hearing impaired, there is no public information that addresses how digital education, including online classroom teaching, will generally be made accessible.\textsuperscript{14}

There are many kinds of schools in the country: some run by the government (central, state, local government bodies) and some by private sectors, i.e., individuals, trusts, and societies. The number of schools managed by central or state governments is almost double the schools managed by other bodies taken together (British Council 2014). In India, the digital gap starts right from the school, where two parallel worlds are taking the shape—government schools and private schools. The government schools receive substantial funds, although most of them are functioning in a miserable condition (Thakur 2014). In 2016–2017, the government schools shared 71.72\% and private schools 19.78\% by count in India. In the rural areas, the government schools were dominant (78.42\%), with only 14.4\% private schools. The scene was, however, the reverse in urban areas: 48.66\% private schools and 35.32\% government schools (U-DISE 2016). In the purview of the rural–urban divide during the pandemic, it is the fact that the rural students will likely be left behind from their urban counterparts in attaining the education. During pre-pandemic times, only 4.09\% of the government schools had an internet connection, where 25.07\% of the private schools enjoyed the same (U-DISE 2016). The consideration in the present times is the students who have digital access at home would stay tuned, keeping the rest deprived. Only a handful of private schools could adopt online teaching methods. Their low-income private and government school counterparts, on the other hand, have completely shut down for not having access to amicable e-learning solutions.\textsuperscript{15}

The aspect of the digital divide is mostly the structural inequality of privileges. Most of the poor students do not have access to smartphones, and even if their ‘poor’ economy does afford the device, the ‘poor’ net connectivity arises as a constraint for most of the remote rural hamlets. The situation is often rather complicated in a multi-lingual country like India. The study materials are often not available in vernacular languages. The latest data available from the National Sample Survey (2017–2018) gives a real insight into the ownership of computing devices\textsuperscript{16} in India. Only 10.7\% of household have computers, and 23.8\% of household internet facilities in the country. The rural figures are at a dismal low, with only 4.4\% of households with computers and 14.9\% with internet facilities. Even in the urban areas, 76.6\% of households have no computer, and 58\% of households have no internet facilities (Ministry of Statistics and Programme Implementation 2019).

In reality, most schools in urban areas are providing online classes, while the majority of rural schools do not. Very young children are not able to learn through online processes as they can neither handle computers nor mobile phones, and there are major health issues that young learners are supposed to be exposed. A section

\textsuperscript{14}An electronic media article in July 2020 pointed out on the leaving behind of the children with special needs, in education during COVID-19 (https://theprint.in/opinion/indias-online-classrooms-are-outdated-for-disabled-kids-covid-just-made-it-worse/463438/).

\textsuperscript{15}Mentioned in an article in Et Government.com, on 16 April 2020 (https://bit.ly/2GXjGUv).

\textsuperscript{16}Computing devices include devices such as desktop computer, laptop computer, notebook, netbook, palmtop, tablet (or similar handheld devices) except smart phones (NSS, 75th Round, 2017–2018).
of parents in Mumbai had urged school authorities to discontinue online classes for nursery students, citing health reasons.\textsuperscript{17} In many households, there is no computer, and in many, children are not allowed smartphones as well (Tahseen 2020).

The government, in the guidelines for digital education during the pandemic, has classified household into six categories (Ministry of Human Resource Development 2020):

- Households with computer/laptop/smartphone and a 4G internet connection as well as television set with DTH/Cable TV connection
- Households with smartphone with 4G access
- Households with smartphone with limited (3G/2G) access or no internet
- Television set with DTH/cable connection
- Households with radio set or a basic mobile phone with FM
- Households with no digital device.

In order to ensure the access of the students in such cases, the digital reach of education has been categorized into three groups: \textit{online} (where computer and smartphone with internet connectivity is available), \textit{partially online} (computer and smartphone available but no regular internet) and \textit{offline mode} (television and radio).\textsuperscript{18}

According to the Telecom Statistics of India (2019), there are 227.01 million internet subscribers in Rural India and 409.72 million in the urban, with a total user of 636.73 million of the 1.21 billion Indian population. The internet density (i.e., internet subscriber per 100 inhabitants) is only 25.36 in the rural areas compared to the 97.94 in urban India, with a total internet density in the country being 48.48. Reportedly, the 99.93% electrification has been achieved by the country in the year 2019,\textsuperscript{19} and about 835 million individuals in 197 million homes have access to television (Broadcast India 2018). There are 1161.71 million mobile subscribers in the country (Government of India 2019). Despite all these positives, the Indian Digital World comes with a connectivity problem with an average broadband speed of 34.07 Mbps. Despite all the numeric data, it is the irony that the use of mobile phones, television, and the internet in India is mostly for leisure and entertainment. According to the report by MICA (2019), Centre for Media and Entertainment Studies, following the availability of internet through mobile phones at a massive scale and low rates, the internet dark zones, especially the semi-urban and rural areas, have got access to content. Many of these users are first-generation Over the Top (OTT) content consumers, attracted to regional content. For India, the highest consumed (OTT) platform is YouTube, followed by Amazon Prime and three Indian platforms Hotstar, Jio Cinema, and Voot (MICA 2019).

\textsuperscript{17}The regional electronic media, Mumbai Mirror, reported on the concerns raised by parents regarding online classes, on 27 June 2020 (https://mumbaimirror.indiatimes.com/coronavirus/news/malad-parents-raise-concerns-over-online-classes-for-nursery-students/articleshow/76658182.cms?utm_source=Articleshow&utm_medium=Organic&utm_campaign=Related_Stories).

\textsuperscript{18}The guidelines have been prepared by the NCERT taking into consideration suggestion by various states and UT (https://www.mhrd.gov.in/sites/upload_files/mhrd/files/pragyata-guidelines_0.pdf).

\textsuperscript{19}See the website, https://saubhagya.gov.in/.
The change of mode, and moreover, which is sudden, adds a list of duties to be taken up by the institute authorities to make their teaching staff adapt immediately with ICT, digital media, or social networks, leaving little time for their acquisition or improvement of skills. In order to involve the students in remote learning, the government has issued guidelines to conduct surveys regarding the various ICT facilities available at home. They have an additional duty of being in constant communication with the parents (Ministry of Human Resource Development 2020). The World Bank (2020) recognizes that the transition to online learning at scale is a challenging and highly complex undertaking for education systems. Even in the best of circumstances, highly motivated learners, especially those with previous experience in online learning, are the most likely to take the most advantage of online learning opportunities.20

8.3.1.3 Effects on the Population Associated with the Education System

Indian education system has been dealing with the problems of access, equity, and quality, for a long time, which has worsened due to the ongoing situation. The key challenges remain in the form of access and quality, funds, and the disparity in the literacy level (Lall 2005). The Indian government however, come up with numerous measures (Sect. 8.3.1.1), especially during the pandemic. The key principle behind the reforms is to ensure access and equity for students.21 In addition to the existing challenges, lack of trained teachers, inadequate learning materials, makeshift classes, and poor sanitation facilities make learning difficult for many children22 for long.

UNESCO (2020a)23 estimates that about 32 crores of students are affected in India, including those in schools and colleges. The hard-hit population is the students in the primary classes (Table 8.4). The argument of the advantages of digital learning arises because the government considers the digital mode of learning as ‘flexible and personalized learning at the speed of the learner’24 and that ‘the most transformational impact of Technology often happens in the lives of the poor’.25 With 68.64% of the population living in rural areas (Census of India 2011b), the debate on learners’ easy access and means to attain regular digital classes at their own pace

20Remote learning and the COVID-19 Outbreak (http://documents1.worldbank.org/curated/en/266811584657843186/pdf/Rapid-Response-Briefing-Note-Remote-Learning-and-COVID-19-Outbreak.pdf).
21The Union Minister of Human Resource Development has mentioned in an article in a national print media, Hindustan Times, 18 May 2020 (https://www.hindustantimes.com/analysis/ensuring-access-and-equity-in-education-writes-ramesh-pokhriyal-nishank/story-KSqyOXK2zkUVpl9krJ04dPhtml).
22https://www.unicef.org/education.
23See the website, https://en.unesco.org/covid19/educationresponse.
24PRAGYATA: Guidelines for Digital Education, MHRD, Government of India, p 1.
25The Prime Minister of India writes in his article ‘Life in the era of COVID-19’, 19 April 2020 (https://www.narendramodi.in/life-in-the-era-of-covid-19-549324).
Table 8.4  Learners affected in India

| Institution type | Female   | Male     | Total    |
|------------------|----------|----------|----------|
| Pre-primary      | 4557249  | 5447169  | 10004418 |
| Primary          | 72877621 | 70349806 | 143227427|
| Secondary        | 63983677 | 69160694 | 133144371|
| Tertiary         | 16739686 | 17597908 | 34337594 |
| India            | 158158233| 162555577| 320713810|

Source UNESCO as on 2 July 2020

of learning has been addressed in Sect. 8.3.1.2. With the advent of cheaper smartphones and a reduction in data plans, the 4G connection is the most preferred choice of internet connectivity (Internet and Mobile Association of India 2019). India has the second-largest digital user base after China, with 433 million active Internet users at present who are 12 years and above and 71 million active Internet users between 5 and 11 years (Internet and Mobile Association of India 2020). However, in practicality, it is injudicious to compare the entertainment activities with the formal participation of the students in an online class. According to the Global Education Census Report (Cambridge 2018), students in India are least likely to use smartphones in lessons (16% versus the 42% global average). The students in India are prone to using blackboards and white chalk for their lessons (67%). Also, Young Indians spend 4 h on average watching television per week and nearly 28 h on mobile, of which 45% of the spent time is dedicated to entertainment (KMPG India 2017; Meeker 2017). A deliberate effort is needed to help students cope up with the loss and also make sure that no student is deprived of obtaining their courses, lessons, and personality development.

8.3.2 Effect on Students and Parents

‘School is the second home of the children’ where the students spend maximum hours of their day other than their own residences. Children and youths in schools learn a good deal and acquire expanded social capacities more than those not in school, even when background factors are controlled (see, e.g., Holsinger 1974; Plant 1965; Meyer 1977). According to the India Education Report (2005), students attend school for about 6 h during the day, with each classroom session spanning 30–40 min and a 30-minute lunch break on an average. Some schools operate for a longer duration (about 8 h), and these schools provide two break periods. This practice has, however, changed due to the closure of the educational institutes. The experience of the government school authorities in Madhya Pradesh is worthy of

26https://economictimes.indiatimes.com/tech/internet/india-has-second-highest-number-of-internet-users-after-china-report/articleshow/71311705.cms?from=mdr.
being mentioned as Yadav (2020) reports. The authorities could succeed to reach to just 30% of secondary and senior secondary students through regular home-based learning programs. The program ‘Humara Ghar, Humara Vidyalaya’ was initially planned to reach 22 lakh students from classes 9–12, but only 20% could be connected through TV and 10% through WhatsApp.

The institutes are spaces of free-thinking and learning of students by mingling with their peers and teachers, as the dominant view has it that the educational institutes prepare individuals to socialize (Meyer 1977). The ‘new normal’ of synchronous and asynchronous learning lays bare the development of students as a social being of being confined to home spaces with a very intimate (Debrock et al. 2020) form of learning. Students staying away from the teachers and peers face psychological problems along with academic lows; 55% of students still find the lack of social interactions troubling. They learn better with fellow students, and for 45% of students, this could lead to underperformance (Roesch 2020). Other than the academic know-how, the educational spaces also play an essential role in the physical and emotional growth of the students. In the case of online learning, the students are exposed only to the subject curriculum. The extracurricular activities that students are engaged in the educational spaces are invaluable learning experiences impacting the physical and emotional wellbeing of the students (Cambridge 2018). The activities increase leadership and teamwork abilities in students, including higher grades, educational achievement, and self-confidence (Saqib et al. 2018). There are serious health implications that come with the over usage of technology by the young, mostly harms the enterprise skills (Lilliard and Peterson 2011) in students. Halupa (2016) says enterprise skills are key skills children need in life, such as motivation, initiative, creativity, individuality, the ability to get along with others, and strategic thinking. The use of technology is one of the contributing factors to overweight and obesity (Kautiainen et al. 2005; Cawley 2010; Halupa 2016), which is a major problem among the youth in the technology-driven world.

In Kerala, the situation of an increase in the number of suicides among children and adolescents is a worrying concern. The primary reasons as cited are varied, like being confined to the home and not being able to share their problems with peers or teachers. Some are being scolded by the parents for using a mobile phone or because there is a lack of facilities to attend online classes (Express New Service 2020).

The students involved with higher education are worst hit by the sudden closure of the institutes with the stranded syllabi and initiation of a revolution in the form of haphazard online modes of education (Kumar 2020; John 2020). According to the All India Survey of Higher Education (AISHE) 2019 report, India has 51649 higher educational institutes, with 37.4 million students enrolled. The population effected by the closure are mostly in the 18–24 years (young adults) age cohort of India

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27 Extracurricular activities kinds of activities and they do not fall into the sphere of normal curriculum and instructional method. The activities can be within the institutes and outside the institutes.

28 The universities, colleges and standalone universities comprise the higher educational institutes. There are 993 universities, 39931 colleges and 10725 Stand Alone Universities in India (AISHE 2019).
enrolled in the institutes in the country as well as those enrolled abroad. The pandemic has seen the return of many students abroad back home, and the persistence of the pandemic may see a decline in the demand for higher education internationally (Jena 2020). In the national level institutes, most of the external assessments have been canceled, and some have taken the online mode of internal assessment. Delhi University (DU) authorities are mulling over conducting end-semester exams online. Most of these decisions are taken without seeking any input from the students though they are the primary stakeholders of any institution. The higher educational institutes like the schools have students who come from various walks of life, from different socio-economic sections of the society, so two-way problems are to be dealt with. One is the access to digital commodities for inclusiveness in learning, and the other is the social exclusion that may come with the closure of the institutes. According to a World Bank Report (2020), students from better-off households are likely to have access to digital resources and to use them to maintain some continuity with academic work during the closures, disadvantaged students (first-generation college-goers, women, tribal youth, economically disadvantaged) will likely suffer deeper learning losses. The effect of falling back shall imply the social mobility of the youth in the long run. Higher education becomes a mandatory stage in the trajectories of upward mobility virtually as education makes it possible for students of a lower class to acquire higher professional positions and to move up in the class structure (Burlutskaya 2014). The structural differences are profound across gender lines, as the disruption leads to increasing inequality in terms of access and participation. In India, female students (especially in higher education) have serious issues of pre-existing technological literacy, socio-cultural norms, and gender bias that lead to additional gender-based digital exclusion (Manazir et al. 2020).

Moreover, the ‘new normal’ of staying away from institutional spaces makes the parents solely responsible for the education of the children, especially the school goers. The closure of schools has made every home a school and every parent a teacher. In an article by Livemint (2020) the writers mention as to how the children in nuclear families are not used to spending 24 h at home with parents, without school and friends. Working parents have difficult times switching between work and family in an undivided home space. In urban India, the constant juggle of the parents between work from home and taking care of young children causes stress (Quartz India 2020). Daniel (2020) points out due to the hiatus caused by the pandemic many parents and guardians may be deeply anxious about their economic future, so studying at home is not easy, especially for children with low motivation. Such homes often lack the equipment and connectivity that more affluent households take

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29 An article by The Print has pointed out some problems that the students might face due to the stringency of the educational institutes to compensate on academic loss. Published on 26 April 2020 (https://theprint.in/opinion/pov/indian-educational-institutes-should-break-norms-in-covid-times-not-conduct-online-exams/408660/).

30 Social Mobility is the phenomenon of shifting from one social position to another either in comparison with family back ground or previous employment (Joye and Falcon 2014).

31 In an article by Livemint the impact of school closure on parents have been highlighted. Published 26 March 2020 (https://bit.ly/3hvSDfs).
for granted, compounding the problem. The urban parents have taken up more of ‘digital parenting’, to keep the children engaged. Parents are tapping the internet to add interesting activities to their kids’ lockdown. Platforms such as BrainPop, Duo Lingo, Khan Academy, and Scholastic are popular among Indian parents for kids to learn a new language, skill, or just pursue a hobby (Quartz India 2020).

The idea of division and disparity has been brought up many times in the different sections of the chapter. The disparity in how parents deal with education is dependent on the economic viability of the parents. The struggle of the parents is different across their economic structures. While an urban parent can afford digital equipment to help their wards, the struggle of the poor parents is severe. Various reports are available from different corners of the country on how the poor parents are dealing with the education of their children.

- ‘In Tripura, a father, who worked as a daily wager, killed himself, disappointed, being unable to buy his daughter a smartphone for online classes.’ (NorthEast Now 2020; Times of India 2020a)
- ‘A poor man in Himachal was forced to sell his cow to buy a smartphone for online studies of his children. The man sold his cow, also his only sources of income, after he received no financial assistance from banks and private lenders.’ (India Today 2020)

These are just a few mentions that clearly bring in the forefront the debate of privileged and underprivileged along with the rural-urban divide. While some parents are turning to digital measures to keep their children engaged, some are making ends meet to provide their children the means to learn. There are unprecedented incidences as well, like The Telegraph reports

‘Parents of some primary school children are doing their school assignments instead of letting them do it. At times, they are even competing with other parents to be the first to upload such assignments on their common WhatsApp groups’. While the MHRD has issued guideline for digital education (PRAGYTA 2020), the problem is the actual involvement of the students in the whole process.

With the increase in digital involvements, the rate of cybercrime and cyberbullying has also increased. Attacks had soared to 86% in four weeks, roughly between March and April (Economic Times 2020). The parents are forced to deal with the demand of the children. They are to track whether the gadgets are used for a purpose. As India Today (2020) reports,

A Punjab boy would tell his parents he is studying online on his father’s phone but instead would play PUBG Mobile for hours lost 16 lakh rupees from his parents’ bank account.34

These are anxious times for students, their parents to cope up with the new normal of the education system.

32The parent who keeps an eye on the young kids and teens online activities in order to protect them from all online dangers is called digital parenting (https://bit.ly/2Fq7fQB).
33See, https://www.telegraphindia.com/west-bengal/calcutta/coronavirus-pandemic-when-parents-invade-online-classes-and-do-kids-work/cid/1785886.
34See, https://bit.ly/2FhdNkB.
8.3.3 **Effect on Teachers, Researchers, and Academicians**

According to UNESCO (2020b), over 60 million teachers are at home as COVID-19 school closures are extended. Where in India, the teachers are trained to teach the students face-to-face, and the gesture of the teacher is part and parcel of the classroom teachings. It poses doubts about whether online or virtual classes can be the right substitute for classroom teachings. The former method seldom generates interactions between the students and teachers (Gupta 2020). The Alternative Academic Calendar\(^{35}\) prepared by the National Council of Education Research and Training (NCERT) provides guidelines to teachers on the use of various technological tools and social media tools available for imparting education in a fun-filled and interesting way. Teachers, Learners as well as parents can use these, and teachers even while at home.

Teachers, especially in private schools, are facing hardship—from arranging whiteboards and smartphones in the middle of lockdown to ensuring that they and their background look presentable enough. Teachers are adjusting in the ways they never had to before (Sahni 2020). The interference of overenthusiastic parents while online classes create tremendous pressure on the teachers as they complain about the quality of teaching, spelling mistakes, improper pronunciation, harsh tone of voice (Deccan Herald 2020). ‘Helicopter parenting’ (i.e., parents hovering around while the child is taking online classes) and calling out on teachers during online classes surmount to a form of bullying led to teachers’ disappointment in e-classes (The Week 2020; Times of India 2020b; Deccan Herald 2020).

The bullying of teachers is not only done by the parents, but the older students resort to means of abusing the teachers on online learning platforms. In an article by The Print (2020), it has been highlighted that:

One of the biggest issues that female teachers face is online bullying, especially from older children. Students create Zoom IDs in random, unidentifiable names and troll teachers. Some switch off their camera and call teachers’ names from these IDs, some use them to send memes.

Moreover, the teachers in private schools face the economic crunch as well. The teachers of the private schools have been, unfortunately, experiencing pay cuts. An exploratory survey by Central Square Foundation (2020) reveals that more than 50% of private schools have uncollected fees, accounting for 13–80% of the annual revenue. Whereas, only less than 20% of teachers in private schools have continued to receive their salaries after March.

The teachers in public schools are dealing with the problem of reaching out to students in the economically weaker sections. In India, state governments are the largest providers of education. However, they are plagued by several challenges,

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\(^{35}\)In this period of Covid-19, which is declared as a global pandemic, the teachers, parents, and students are at homes to prevent its spread in the community. In this situation, NCERT has developed an *Alternative Academic Calendar* for all stages of school education to provide multiple alternative ways of learning at home through interesting activities ([https://ncert.nic.in/alternative-academic-calendar.php](https://ncert.nic.in/alternative-academic-calendar.php)).
including large student-teacher ratios, infrastructure, and lack of quality training among teachers (Samantaray 2020).

Similarly, researchers have been stalled at home. Research works involving laboratory-based experiments with specialized equipment have remain standstill as there is no ‘online’ alternative. There is also the trimming of funds to continue or undertake new research and innovation activities worldwide (World Bank 2020). The field-based researches are paused. Scientists working in fields that tend to rely on physical laboratories and time-sensitive experiments of bench sciences\footnote{Bench sciences are subjects like biochemistry, biological sciences, chemistry and chemical engineering.} reported the largest declines in research time, in the range of 30–40\% below pre-pandemic levels. Conversely, fields that are less equipment-intensive—such as mathematics, statistics, computer science is reported to face the lowest declines in research time (Myers et al. 2020).

The research and researchers in the Indian universities have been affected by the sudden hiatus caused by the pandemic. University Grants Commission, while laying down their guidelines in view of the pandemic, has acknowledged that ‘research has suffered as the laboratories are closed’.\footnote{Mentioned in UGC Guidelines on Examination and Academic Calendar for the Universities in View of COVID-19 pandemic and Subsequent Lockdown (https://www.ugc.ac.in/pdfnews/4276446_UGC-Guidelines-on-Examinations-and-Academic-Calendar.pdf).} The decision is to be taken by the institutes to allow scholars to carry out their research. The problem is serious for the scholars who are on the verge of completion of their research. The University Grants Commission (2020) in the guideline mentions:

The M.Phil. or Ph.D. students, whose maximum period for submission of M. Phil./Ph.D. Dissertation/Thesis prescribed under relevant rules/regulations/ordinances of the concerned universities is expired/expiring during the Corona pandemic period, may be allowed to submit their Dissertation/Thesis, including completion of pending formalities, within six months from the date of expiry of regular prescribed period. The extension of six months may also be considered for those students who are yet to submit their Dissertation/Thesis.

The time constraints have been dealt well with by the UGC, but the concerns raised by the scholars is regarding fellowships and grants, which are available only for 5 years. Extension of six months for some research scholars would mean going without any monetary aid. In view of the back draw, a student of Indian Institute of Technology Madras has started a petition a part of which reads:

Educational institutes remained shut, leaving scholars with no access to research infrastructure. This has resulted in a lot of anxiety among scholars about the expiry of their fellowship. All experimental setups have already either degraded or unusable due to a long delay. Scholars now have their fellowships expiring in the middle of the nationwide lockdown leaving them without any means to survive. The financial pressure is a huge mental stress for us along with their health and future uncertainty.\footnote{The excerpts of petition has been mentioned in an article by Deccan Chronicle, published on 8 July 2020 (https://bit.ly/35A73ZC).}
Various monthly scholarships have been blocked or not appropriately disbursed for more than six months in different Indian universities, according to a group of research scholars from across the country.39

Besides, there is a persistent gender gap in every aspect of scientific (Blickenstein 2005; Huang et al. 2020) research a work that is yet again visible in the academics and researchers during the pandemic. Myers et al. (2020) show that female scientists and researchers with young dependents have reported a substantial effect on their ability to devote time to their research. The mothers in academics are the group who during the pandemic have high chances to fall back in their academic works. Instead of research works, they are likely to devote time to homeschooling children and doing household chores (Staniscuaski et al. 2020). Those who are struggling to keep their careers on track, these months of heavier duties may increase the distance between them and their male and childless peers (Huang et al. 2020).

8.3.4 Addressing India’s Take on Rights and Sustainability

The Right of Children to Free and Compulsory Education (RTE) Act, 2009 in its Schedule lays down Pupil-Teacher Ratio (PTR) for both primary and upper primary schools. At the primary level, the PTR should be 30:1, and at the upper primary level, it should be 35:1. The Rashtriya Madhyamik Shiksha Abhiyan (RMSA) framework stipulates that the PTR at the secondary level should be 30:1. The kind of teaching practices that have been adopted by India puts to question the inclusiveness, equity, quality, and also future opportunities. There are reported death of young students from parts of the country for being ‘incompetent’ to meet the needs of Digital classes and assignments. In post-lockdown Karnataka, there is a ‘worrying jump’ in the number of suicides. The death rose by 23% in May (1127 died) and by 18% in June (1084 died).

As noted by the Regional Director, WHO of South-East Asia Region, it is the stigma related to the COVID-19 infection that may lead to feelings of isolation and depression. Another precipitating factor mentioned could be domestic violence as a factor for impacting mental health with increasing cases of domestic violence globally as lockdown had been imposed. The chairperson has stressed the importance of early identification of mental health conditions, recognition of suicidal behavior, and appropriate management through a multi-sectoral approach.

The head of psychiatry at Victoria Hospital, Bengaluru, says that the reasons for suicide are multifactored, combined, cumulative, un-resolving, and interrelated. People should be watchful of the family member with a history of suicidal attempts and always look for signs (Chetan 2020). It might seem quite unnatural with the low budget smartphones and unlimited data plans, but incidences do say otherwise about India going digital. Rural or urban, there remains a disparity in accessing the digital

39 The non payment of scholarship has been reported by NDTV Education on 7 August 2020 (https://www.ndtv.com/education/research-scholars-complain-non-payment-of-fellowships).
infrastructure in India. However, a more flexible way of teaching and learning does not end up with infrastructure. Instead, infrastructure is only the first step toward a new paradigm of teaching and learning in post-pandemic time.

This paradigm could represent a shift from traditional, teacher-centered, and lecture-based activities toward more student-centered activities, including group activities, discussions, hands-on learning activities, and limited use of traditional lectures. Full long-term integration of online teaching and learning into university curricula implies further attention to quality (Zhu and Liu 2020). One of the primary challenges to child rights is school dropout and access to proper nutritious food. The chairman of the Delhi Commission for Protection of Child Rights says that the challenge of homelessness and economic constraint shall push children, especially boys, into child labor resulting in reduced school attendance and increased dropouts after the pandemic is over. There would be a rise in cases of early marriage in case of girls and issues related to the Protection of Children from Sexual Offences Act (POSCO) and Juvenile Justice (Baruah 2020).

There has been increased attention toward education for a Sustainable world. There has been a repeated reminder to the various countries by the UN to implement education for a sustainable future. To make higher education a catalyst for creating sustainable, innovative, and equitable societies, governments, and universities have to develop policies to make colleges and universities both affordable and inclusive (UNESCO et al. 2017). The energy and passion of the youth, if utilized properly, can bring substantial positive change to society and progress to the nation. Youth is the creative digital innovators in their communities and participate as active citizens, eager to positively contribute to sustainable development (Government of India 2017). The existing gender disparity in all form of life is an invisible evil which continues even during these times with new major and minor differences. School closures do not just mean that girls are taking on more chores at home; rather, it could also lead to millions of more girls dropping out of school before they complete their education, especially girls living in poverty, girls with disabilities, or living in rural, isolated locations. Even before this pandemic, millions of girls were contending with low-quality education—and millions were not on course to meet minimum proficiency in basic reading and math, nor the secondary level skills, knowledge, and opportunities they need for a productive and fulfilling life. Gender discrimination not only restricts girls’ abilities to accumulate human, social and productive assets, limiting their future educational and employment opportunities but also hinders their wellbeing and diminishes their self-belief (UNICEF 2020). Empowering women and girls drive better and quicker sustainable development outcomes for all, support more rapid recovery from the crisis, and place us back on a footing to achieve the Sustainable Development Goals.

The Government of India has launched various programs to reach out to the students as having been mentioned earlier. However, it is very crucial to keep a check that every group is represented well. According to Article 9 of the Convention on the Rights of Persons with Disabilities, the states require to ensure that

40See, https://www.un.org/disabilities/documents/convention/convention_accessible_pdf.pdf.
persons with disabilities can access information, communication, and technology (ICT) systems. Also, Section 42 of the Rights of Persons with Disabilities Act, 2016\textsuperscript{41} directs governments to ensure that ‘all contents available in audio, print, and electronic media are in an accessible format.’

School closures have a particularly adverse effect on poorer students, students without stable internet access at home, and children relying on help from their schools in meeting their nutrition and health needs. The situation is especially acute for girls and young women who are excluded from education disproportionately (UNDESA 2020). According to a study by the World Bank (2020), the shock of the closure of educational institutes will lead to learning loss, increased dropouts, and higher inequality, and the economic shock will exacerbate the damage by depressing education demand and supply as it harms household. Together, they will inflict long-run costs on human capital and welfare.

8.4 What Could Be the ‘New Normal’ During the Post Reopening of Educational Institutes?

The progression of reopening educational institutes is the biggest challenge to the government of all the countries. The decision shall be sensitive to the political agenda. It has to be decided upon keeping in mind the population in various age groups who shall return to the institutes. The step is not only to bring back the educational spaces to normal but also to ensure help to students who fall behind, proper health facilities, and maintaining physical distance until the pandemic has been wholly eradicated. The new norms to reopen schools should lay utmost importance to mental health, which can see a surge due to the practice of physical distancing among the young student population.

The real situation is, unfortunately, disappointing. In India, around 17.6% of posts for the primary level and 15.7% of posts at the secondary level for government teachers are vacant. Around 108017 schools in India are single-teacher schools, and in about 17% of schools, a teacher has to manage more than 40 children. Besides, presently, around six lakh teachers who are older than 55 years are serving the school education system and are more vulnerable to the threat posed by COVID-19 (Bakshi 2020).

There are not enough options for the teachers as well to maintain social distancing in staff rooms as most of the schools provide a single staff room for all teaching faculty, and in 55% of schools, there is additional room along with staff room for the principal. A survey in 453 schools by ‘WaterAid’ revealed that only 43.5% of schools have teachers trained on sanitation and hygiene. The preparedness for reopening of schools brings forth the urgency of substantial investment. It has reaffirmed the notion that implementing social distancing norms will require more resources in schools, resources for infrastructure, for filing vacant posts for teachers, for training teachers,

\textsuperscript{41}See, http://www.iitg.ac.in/eo/sites/default/files/RPwDAc2016.pdf.
and recruitment of non-teaching staff. On the contrary, the Ministry of Human Resource Development (MHRD) allocations for school education have decreased during the last six years—0.42% of the GDP in 2014–2015 to 0.26% of the GDP in 2020–2021 (Bakshi 2020).

There are a wide number of educational challenges that have been left bare due to the ongoing crisis, which requires immediate management to eradicate the effects the pandemic has brought along. UNESCO and United Nations Office on Drugs and Crime is working to (i) place rights at the centre of education, (ii) support teachers, and (iii) build bridges between changemakers in education and justice sectors—all of which is in context of the Global Education Coalition which provides platform to join forces with other multilateral actors, including international organizations and civil society and private sector partners, to ensure the current crisis does not widen learning inequalities and that the rights of children and youth are protected (Giannini and Brandolino 2020).

Critical conditions to assess include access to soap and clean water for hand-washing, and protocols on social distancing. Safety can also mean reducing the number of students on site, through double shifts, prioritizing early grades or particular target groups, or continuing with a blended learning approach. After safety, there must be a focus on the learning recovery process—from assessing learning outcomes during school closures, ensuring their socio-emotional wellbeing, and taking measures to address disparities through remedial approaches. Sufficient manpower should be engaged in the educational institutes that will help in maintaining the necessary prerequisites of the rules and norms that are to be laid down by the government for the safe opening of the educational institutions.

The Ministry of Health and Family Welfare, Government of India, has laid down Standard Operation Procedures (SOP)42 for the partial reopening of schools for the students of classes 9–12. The guidelines mention hygiene standards to be maintained pre and post-opening of the institutes with proper physical distancing procedures. It has also been mentioned that students attending schools require the consent of the parents to start attending school on 21 September 2020. The issues addressed in the SOP are generic preventive measures, arrangements to be made by the institutes’ pre and post reopening, hygiene, and sanitation, risk communication, psychosocial well being and measures to be taken in case of stakeholders in the institutes acquire the COVID syndrome.

8.5 Conclusion

Immediate measures have been taken by the Government of India to cope up with the sudden stop in the education system. However, the responses somehow failed to serve the huge student base of the country with the existing Digital Divide in the

42See: https://www.mohfw.gov.in/pdf/FinalSOPonpartialresumptionofactivitiesinschools8092020.pdf.
country. The idea of equity, accessibility, affordability has all been put to question. It has and will directly or indirectly impact all the sections of people in the country. The fundamental human rights and the ideas of Agenda 2030 have also been put to a standstill. And, once the pandemic passes, it shall be put to the test. Of all the shortcomings and violations, the farsightedness is what the future holds, and if this pandemic helps us, ‘Build Back Better.’ This is a once in a generation opportunity to improve education, alongside economies, to fight the climate crisis. It is a time for education leaders to use this period of disruption to ensure what people learn is truly relevant to their lives and the survival of the planet. The hiatus in all sectors caused can be used to rebuild the systems in a way that the future generation are the ones who shall enjoy the fruits of sustainability and pass it down the lineage. Sustainability and development move in a straight-line path with the catalyzing effects of education and awareness as the key. The rampant exploitation of natural resources by the dominant species on the earth shall help in only short-term developments, which with time, may end its effect and leave nothing for the generations to come. While Agenda 2030 for sustainable development pledges to ‘Leave no one behind’ in their endeavor, there is much to do in order to include everyone. The pandemic is just an initial warning to how unprecedented changes in the natural system may look like to develop but with bigger setbacks. The pandemic has laid down a chance and opportunity to correct all that has gone wrong.

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