

Digital Divide: Managing Inequities and Environmental Injustices

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Abstract

The digital divide is a space between the haves and have-nots of the internet. Due to the COVID-19 pandemic all over the world, students are asked to shift to online learning. This transition was easy for fortunate students. On the other hand, unfortunate ones have tasted huge loss, especially due to insufficient internet access and electronic devices, which is leading to poor and unacceptable educational services. A rise to the digital divide among students has taken place due to this unequal access. Many expenses such as Wi-Fi, laptops, mobile phones, and cellular data are not on the budget of underserved communities. Education is often seen as a standardizing factor in life. The huge digital divide in education means a big obstruction to the development of the underdeveloped society since there will be no room for inventing new technologies and conduct research. A stronger infrastructure is required to provide an uninterrupted internet connection to students if the digital divide has to be narrowed down. The motto of this paper is to focus on the factors that might affect education due to digital divide and the importance of education. It also highlights the way we can bridge the gap of digital divide in education and help students grow. If a push is given towards digital literacy, both supplies and manufacturing can lead to a meaningful change in this e-education era.

Keywords: Digital divide, education, technology, internet, online learning

1. Introduction

In spite of students who enjoyed the late start schedule, pajamas, and the freedom of studying under their own steam during online classes, far too many fell off the track. The impact of the pandemic on the education sector is likely to last for years. Due to the Covid-19 lockdown in the world, physical classes in all educational institutions have been suspended. As a consequence, students are being taught and assessed online. Fairfax Digital stated that [2] a report, by Pivot Professional Learning, found teachers in Australia's most disadvantaged schools were four times less confident using their school's primary technology and only half as confident as their colleagues in the most advantaged schools that they had the professional learning necessary to teach online. The march towards digitalization is in many ways forced upon us. While online learning is a boon in many ways, like the ability to take more courses and being in a congenial environment, it is perceived as a bane by the underprivileged. Think of the interventions that we can now deploy: online tutoring, programs that consist of classes taught

by teachers from other schools, or better ways for students to keep in touch, but not everyone are so privileged. Various characteristics can affect access to information and communications technologies (ICTs), including income and education, employment, age, sex, and ethnicity, just to mention a few.

2. Digital Divide comes to light

A Digital Divide describes the gulf between the haves and have-nots of technology. In addition to the telephone, television, and computer, this technology can also include the internet.

3. Why is it a world-wide problem?

A high price tag on computers reveals a huge gulf that exists between those who can afford them, and those who can't. Throughout time, digital divides have become more and more complex as access to video and computer technology has continued to change. This has occurred because of low literacy rates, a lack of motivation to use technology, and physical access to technology have all contributed to this growth.

4. Who is most affected by the digital divide?

It's students. The Times; Shreveport La report explained [5] the pre-covid scenario regarding privileged population being able to incorporate virtual platforms which is an asset and the remaining population is left behind.

5. Technology as a Bane

The e-learning program has adversely impacted the education system and transitioned 320 million students to an online environment, which is comprised of 1.5 million schools, in which the majority are from socially disadvantaged classes. Physical classrooms are a very important part of the learning process, and e-learning platforms cannot replicate that. If e-learning is to be seen as the "New normal," the policy needs to address how feasible it is to make digital learning possible. Students from privileged backgrounds will be able to adapt to a higher level of technology relatively easily. However, students with lower socioeconomic status will have difficulty adapting either because the technology is not available or because the housing conditions are poor. In addition to the stress of access and affordability for students, keeping up with courses and peers is a major challenge. Unlike an active classroom, e-learning does not provide one-to-one help from tutors or discussions regarding assignments.

6. No internet- try again

Even during good times, broadband reduces opportunities for people, but it can be crippling after a disaster, makes it hard or impossible to apply for aid or obtain recovery resources. A 4G LTE connection is typically, 5 to 6Mbps in speed. Putting that in perspective, consider

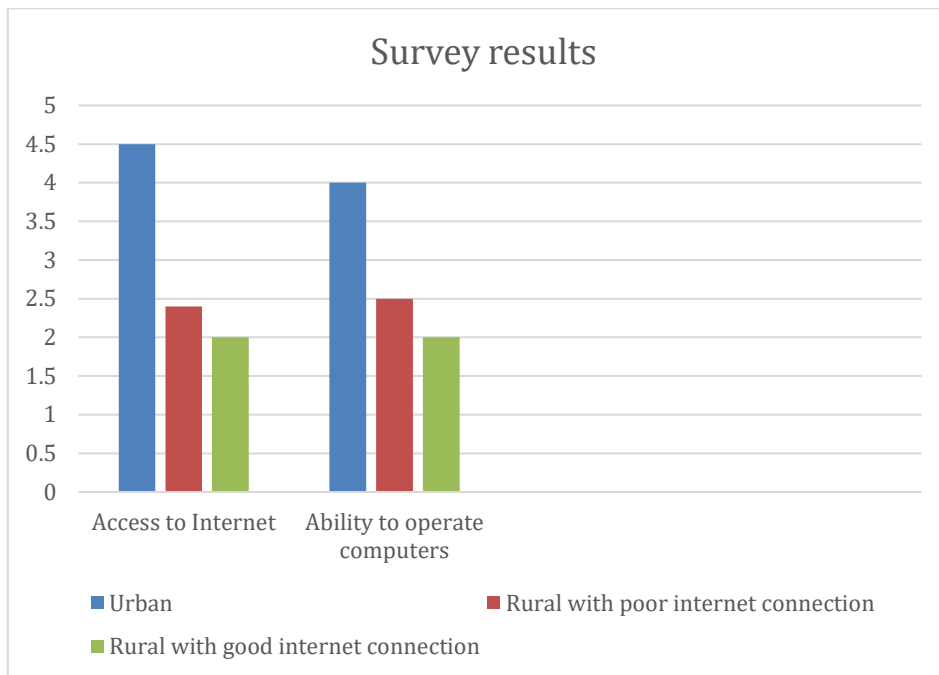
that a single YouTube video at 720P can take nearly 1.5Mbps; this means that three students who are using a video lesson to improve their learning can bring the entire family to its knees.

7. Urban access Vs Rural access- The graph never went up

The digital divide has been growing for years, but the global pandemic has accelerated its growth. It's not enough According to a survey I conducted at a few colleges in Hyderabad,

only 15% of rural households have access to the internet, compared with 42% of urban households. Technology is not the only factor that contributes to the huge divide; it is also a factor in access to technology. Only 10% of rural students are able to operate

computers, compared with 32.4% of urban students.



8. Bridging the gap

Microsoft's Mary Cullinane, School of the Future Technology architect says [1] "Adaptive teaching and learning techniques supported with the correct technology can provide students a stimulating, interactive way to study a subject like chemistry without having to be in the chemistry lab," Naqvi, Shahid explained [4] how important is bridging the gap of digital divide and what measures and actions were implemented to make this happen.

It is hard question to ask ourselves what we can do about bridging the gap. We need to engage in many initiatives to narrow the digital gap at various levels.

9. Enhancing digital literacy

A wide range of free and inexpensive platforms are available for students such as Khan Academy, UnAcademy, and NPTEL. Professors, lecturers, and all educators should bring awareness to their students about such platforms so that they can make the most of them and build themselves up. Usually, teachers can create apps for each subject and upload videos to them so that students can watch them at their convenient times or when they have wi-fi. Zoraini Wati Abas quoted the statement given by the

white house [3] “every child in America deserves a 21st century education and access to 21st century technology”. For this to happen, the US government for the e-rate programme in schools and libraries. In a way, it is an attempt to expand technology and tools of technology in every learning field.

10. Initiating Cyber Clubs

It is hard to find a Hyderabad Street without at least one free Wi-Fi zone or more, especially near metro stations. The city of Hyderabad is already one where practically every person has a smartphone and a mobile data subscription. It's better to invest money in underprivileged areas rather than such cities. Ramannagudem, for instance, is a place in Warangal where there is no broadband network connection. Thus, we can make investment in such areas and give them access to the internet.

11. Constitution of the technology stakeholders.

The book "three thousand stitches" describes a story where SudhaMurthy seeks to banish devadasi. Her goal is to tell girls about the possibility of bad things happening to those who choose this profession. Nevertheless, they did not listen to her. By imparting education to their children and helping them overcome some problems, she first earned their trust before discussing AIDS which devadasis may suffer from. The same goes for the areas, where there is little or no technological knowledge. We need to give them technology and let them learn about the miracles it can create. Once they trust us, we can do campaigns and create awareness among them and encourage them to use technology.

12. Adding “e” to learning

There were few states that provided books to underprivileged students. In this regard, I would recommend that the state government issue phones to every government school. There should be a fixed number of phones permitted for every class, just as every class has a number of benches. Since the phones are not given to children instead, they are lent to children, this is only a one-time investment. D'Cruz, Damian gave the essence of e-learning through the following words [6]: “Self-directed computer-based training content has been combined with online communication and face-to-face initiatives in which is now called ‘blended’ learning”.

13. Conclusion

Thanks to the cloud and tablets and smartphones, the world has been able to access. Historically, there has been a divide between online and offline. Our perspective on the internet as 'online' will change in the coming years. All we need is to connect. You can count on it for the rest of your life. Only the absence of its presence will be notified when it is no longer available. Digital learning is not merely an escape from traditional education. In the eyes of peers and teachers, it is a way to enhance learning their interactions in order to achieve their goals. As society becomes more technologically advanced, jobs will flow to where expertise is located. The purpose of education should be more than getting a job but creating opportunities for growth.

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