

Education in the time of COVID: Who has the opportunity to learn?

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Abstract: In lieu of face-to-face meetings, the Department of Education adopted three distance learning approaches to conducting classes in SY2020-21, namely, online distance learning (ODL), modular distance learning (MDL), and radio/television-based instruction (R/TVI). Applying the concept of “digital divide” to remote education, the paper contends that limited access to the necessary infrastructure and devices that support distance learning breeds inequality in access to educational opportunities in the time of COVID.

Key Words: remote education; distance learning; inequality in educational opportunities; education in the time of COVID

1. INTRODUCTION

In an effort to contain the spread of the COVID 19 virus, the Philippine government put Metro Manila on lockdown in March 2020. The ongoing quarantine translated to restrictions on local and foreign travel, business operations, and mass gatherings (UNICEF, 2020; Yap & Jiao, 2020). Classes, initially suspended, were eventually allowed to resume utilizing a multi-modal approach. Indeed, the Department of Education Basic Education Learning Continuity Plan calls for the use of modules or ready printed self-learning materials (Modular Distance Learning), radio/television-based instruction (R/TVI), and online facilities (Online Distance Learning) in lieu of face-to-face meetings (Department of Education Region VIII, 2020).

Transferring the responsibility to teach and learn to the home, however, is likely to compound educational inequality owing to differences in household income, level of educational attainment of family members, and family background (Bayrakdar & Guveli, 2020). More importantly, access to what is

now deemed essential learning infrastructure and devices (i.e., power, internet service, computer, etc.) could and, most probably, would determine who gets to learn in the time of COVID.

This paper discusses the consequences of the abrupt, albeit necessary, switch to remote education on the poor’s access to educational opportunities.

2. METHODOLOGY

The paper presents the results of the Department of Information and Communications Technology’s National ICT Household Survey 2019 and uses a descriptive approach in explaining how access to basic remote education infrastructure and devices widens the digital divide in education, particularly during the time of COVID.

Accordingly, the paper uses the concept of digital divide in examining the implications of the Department of Education’s distance learning and blended learning strategy (a.k.a. remote education) on student access to educational opportunities,

particularly for those who come from low-income households. Digital divide, for the purpose of this paper, is defined as differing “access to information and communication technologies (ICTs)”—which includes, among others, access to computers, internet services, and other digital equipment (Eamon, 2004, p.91). In education, especially given the switch to remote education, students with little to no access to modern information and communication technologies are unable to secure educational materials and to participate in online learning activities (Brandon & Reid, 2012); thereby, depriving them of the opportunity to receive effective instruction. And, while academic achievement is affected by a host of varying but interrelating factors, research shows that, “technology can increase students’ academic performances, especially in learning mathematics and science subjects” (Galuszka, 2007, as cited by Sun, 2011, p. 158).

3. RESULTS AND DISCUSSION

Out of the estimated 28 million students in the country, roughly 25.04 million were reported to have enrolled in public schools, private schools, and state/local universities nationwide for school year 2020-21 (Dancel, 2020; Luz, 2020). Notable in the current year’s statistics are the estimated 2.73 million learners who did not enroll—with private schools barely reaching 50% of last year’s enrolment level—and the more than 400,000 who transferred from tuition-based to tuition-free educational institutions (Luz, 2020; Malipot, 2020).

As schools are currently barred from holding face-to-face classes, the Department of Education Basic Education Learning Continuity Plan mandated that educational outcomes be achieved through a combination of online classes/online distance learning (ODL), ready printed self-learning materials/modular distance learning (MDL), and radio/television-based instruction (R/TVI). Consequently, transferring some of the responsibilities of teaching from the academe to

the homes and requiring the latter to provide a conducive learning environment to facilitate the conduct of remote education.

Per the results of the Department of Information and Communications Technology’s National ICT Household Survey 2019 (2019), however, a considerable proportion of Filipino homes do not have the necessary infrastructure and devices to support remote education—such as internet services, radios, and televisions (refer to Table 1). Based on the data, even access to power may be a problem for households residing in the Bangsamoro Autonomous Region in Muslim Mindanao, where 15.3% of the more than 500,000 respondents had no electricity (refer to Table 1). Access to internet service, a requirement of ODL, is also limited across the Philippine regions—with 82.3% of the total number of respondents (23,360,960 nationwide) confirming that they had no internet access. Equally constrained is the ownership of complementary devices to effectively carry out online classes. Per the results of the survey, some 7.23 million computer devices are owned by the 23.4 million respondents¹. Table 2 shows that a little over 50% of these gadgets, 3.7 million, are laptops and less than a third, 2.2 million, are tablets.

Table 1. Access to basic remote education infrastructure and devices

	Without Access (in %)		
	Philippines	Minimum	Maximum
Electricity	5.0	1.2 (NCR)	15.3 (BARMM)
Internet	82.3	66.8 (NCR)	95.5 (BARMM)
Radio	52.9	39.7 (REG. 6)	79.7 (BARMM)
Television	17.3	5.5 (REG. 3)	30.8 (REG. 9)

Note: Department of Information and Communications Technology (National ICT Household Survey 2019). Retrieved from <https://dict.gov.ph/ictstatistics/nicths2019/>

¹ With multiple responses—one respondent may have more than one device

Meanwhile, almost 60% of students who have access to cell phones in the National Capital Region do not plan on using them for classes owing to “the cost of phone load”, “the need to share phones”, and the phones are old/outdated (Economic Policy Research Institute [EPRI], 2020, p. 26).

In fact, the Economic Policy Research Institute (2020) study on The Impact of the COVID-19 Crisis on Households in the National Capital Region of the Philippines confirmed that “the lack of money and lack of gadget” (EPRI, 2020, p. 25)—27% and 23%, respectively, of the survey responses—are the two leading reasons cited for the decision not to enroll in SY 2020-21.

Even “joining” classes broadcasted through radio and television may not be an option for a significant segment of Philippine households due to the absence of the required devices—52.9% had no access to a radio, whereas 17.3%, had no access to a television (refer to Table 1).

Table 2. Access to computer by type

	With Access (in %)		
	Philippines	Minimum	Maximum
Desktop ²	19.0	8.5 (REG. 4-B)	26.7 (NCR)
Laptop ²	50.55	50.5 (REG. 6)	67.8 (REG. 2)
Tablet ²	30.3	16.3 (REG. 2)	44.4 (REG. 4-A)

Note: Department of Information and Communications Technology (National ICT Household Survey 2019). Retrieved from <https://dict.gov.ph/ictstatistics/nicths2019/>

Since parents cannot afford online classes, utilizing ready printed self-learning materials seems to be the most viable alternative open to the majority of the students who were able to enroll in SY 2020-21 (EPRI, 2020).

Modular distance learning (MDL), as designed by the Department of Education, requires adult supervision. Teachers provide parents/guardians instructions on how to assist students in accomplishing the weekly learning activities. If and when necessary, parents and students can communicate with the teachers via text, messenger, and so on (Codamon, 2020). Students, who have access to internet enabled devices, can likewise join online classes and activities (i.e., participate in discussions, ask questions, etc.) as an accompaniment to the ready printed self-learning materials (EPRI, 2020).

Hence, despite its seeming independence from the requirements of ODL, teaching and learning via MDL are considerably enhanced with access to a computer and internet service. Similar to the findings of previous studies on the impact of digital divide on access to education, students who have no means to promptly correspond with their teachers in SY2020-21 may be unable to retrieve necessary information for them to do well in class (i.e., additional exercises, answers to queries, etc.), to benefit from the guidance teachers can provide the class during “live” sessions, to access reference materials on top of those provided by the school (i.e., textbooks, dictionaries, podcasts, etc.), and so on (Brandon & Reid, 2012). Moreover, past researches confirmed that interaction between students and teachers and engagement among peers facilitate a better understanding of the lessons and solidify student commitment to learning (Cardoso, Ferreira, Abrantes, Seabra, & Costa, 2011). Consequently, without the benefit of online class/teacher interaction, students may be less motivated to devote time on schoolwork (i.e., reading assignments, drills, etc.) that can lead to poor academic performance.

Thus, even with the MDL option, students who have little to no access to a computer and internet service do not have the same opportunities to learn and to do well in school as compared to their

² With multiple responses—one respondent may have more than one device

counterparts who have the means to actively participate in online classes.

Recent studies, however, reveal that barriers to learning at home go beyond access to internet service and devices. Indeed, EPRI's (2020) initial findings on student activities under the Department of Education's distance learning approaches revealed that time spent on educational activities varied widely among students—between 0 to 21 hours. In addition, parents identified the “lack of sufficient time to supervise the educational activities” (EPRI, 2020, p. 26) of their children, especially when there is more than one student in the household, and the lack of familiarity with technology as obstacles to effective adult supervision.

Whereas, in higher educational institutions, Rotas and Cahapay (2021) and Baticulon et al., (2021) documented that students struggle to: 1) balance time allocated to studying and responsibilities at home; 2) find space that is conducive to learning; and 3) simultaneously master the learning management system and class lessons.

4. CONCLUSIONS

Notwithstanding the Department of Education's valiant attempt to “open” schools sans face-to-face meetings, the prescribed distance learning approaches for SY2020-21 are likely to increase inequality in access to educational opportunities. Available data on access to basic remote education infrastructure and devices show that less than 20% of the surveyed Filipino households have internet connection. In addition, no more than 31% of the 23.4M respondents to the National ICT Household Survey 2019 own the required online distance learning devices (i.e., desktops, laptops, and tablets) (Department of Information and Communications Technology, 2019).

Access to a computer and internet service, however, is necessary to “attend” school in SY 2020-21. It is necessary to take full advantage of the opportunities offered by distance learning (i.e., reading assignments, drills, etc.), and, likely, to do

well in school (i.e., through class/teacher interaction, consultation, etc.). Therefore, access to modern information and communication technologies is a necessary component to learning in the time of COVID.

As a medium- to long-term strategy, there is no doubt that improving access—both in terms of availability and affordability—to basic remote education infrastructure and devices for roughly 80% of Filipino households is key to bridging the digital divide in the Philippine educational system, especially if distance learning will continuously be employed as one of the modes of delivering educational services under the new normal.

For the here and now, in continuing distance learning, EPRI (2020) is advocating for the Department of Education to actively promote and to continuously build on its TV and radio and other educational TV programming mode. Students who have little or no access to computers and internet services can utilize ETVs as complementary resources and/or accompaniments to the modules and, perhaps, “help stem learning losses” (EPRI, 2020, p. 29).

Lastly, in December 2020, the Department of Education recommended “limited face-to-face” classes for low-risk areas (at least under MGCQ) and following a set of strict and comprehensive guidelines to guard the health and safety of all stakeholders (Department of Education, 2021). The proposal, however, was disapproved.

5. ACKNOWLEDGMENTS

The work that went into the preparation of this document (i.e., data gathering, writing, etc.) was not funded by any institution. The paper—from its inception to its completion—was a product of the author's curiosity about the possible consequences of distance learning on access to educational opportunities. The inquiry process required no assistance from any individual nor institution but was certainly tremendously benefitted by the efforts and findings of the pioneers in the area of research.

Finally, the author is also grateful to De La Salle University for considering the paper for presentation at the DLSU Research Congress 2021.

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