



POLICY BRIEF

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Education in the Time of COVID-19: Assessing the Accessibility of Online Learning for Filipino Learners

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Background

Many economic and social activities have been halted as the COVID-19 pandemic swept around the globe. While much highlight has been given on compounding problems and issues such as the stoppage of work, the slowing down of economic growth, and the planning of any economic stimulus, problems and issues from the education sector must also be given attention. With face-to-face classes being cancelled to curb the transmission of the virus, schools around the world have opted to using online platforms to ensure continuous learning. While the [World Economic Forum](#) saw this as an opportunity for the education sector to rethink the strategies for learning in the 21st century and to harness the potentials of using the available technology, developing countries may face some crucial challenges.

In the Philippines, the Department of Education is already planning some contingencies on delivering classes for school year 2020-2021, among which include the usage of [online platforms](#), [blended learning](#), and [even televisions and radios](#). However, sentiments against these moves are aired out especially in terms of the country's preparedness in implementing these modes of delivery. Thus, the question of whether these measures will ensure that Filipinos are not capability-deprived of accessible education arises. A basic profile for the accessibility of online and alternative learning modes will be of great help for policymakers and educators alike in ensuring the effectivity of any contingencies for the "new normal," as well as future-proofing the continuous learning experience of Filipino students for any shocks that may arise such as this pandemic.

Evidences

The calculations below are estimated from the Family Income and Expenditure Survey of 2015. Thus, the tables present a household-level analysis of the necessary indicators in answering the issue raised above. While an analysis using a more recent dataset may be more helpful in generating the estimates, data availability in the public domain prohibit us from doing so.² Nevertheless, the estimates below will allow us to make sense on the issue of accessibility of online learning materials for Filipino workers.

Table 1 presents the number households with schooling members last 2015 by region.³ The third column also reports the percentage of households with schooling members out of all the households in each respective region. Thus, overall, we have about 15.8 million households with schooling members in 2015 out of about 22.7 million households in the country. For each region, about 70% of the households have schooling members in 2015. With these demographics, we create a profile of Filipino learners in each household in accessing online and other forms of learning materials that their respective schools might offer in the incoming school year.

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² The Philippine Statistics Authority's FIES 2015 dataset is the most recent one given by the University Library.

³ These were identified by whether these households had any expenditures on education in 2015.

Table 1. Households with Schooling Members in 2015 (per Region)

Region	Number of Households (in 000)	Percentage of Households
Ilocos Region	802	68.58%
Cagayan Valley	575	70.43%
Cordillera Administrative Region	281	69.91%
Central Luzon	1,670	66.63%
National Capital Region	1,960	64.92%
CALABARZON	2,195	67.53%
MIMAROPA	500	71.80%
Bicol Region	966	76.54%
Western Visayas	1,153	67.87%
Central Visayas	1,152	68.89%
Eastern Visayas	714	73.22%
Zamboanga Peninsula	595	72.15%
Northern Mindanao	754	73.22%
Davao Region	795	68.72%
SOCCSKSARGEN	785	74.48%
Autonomous Region of Muslim Mindanao ⁴	478	69.91%
Caraga Region	430	74.16%
Philippines	15,806	69.54%

Source of Basic Data: Family Income and Expenditure Survey 2015. Estimates are weighted

Table 2. Percentage of Households with Schooling Members with Access to Alternative Channels of Learning (per Region)

Region	Internet	Computer	Cellphone	Television	Radio
Ilocos Region	7.70%	26.89%	93.82%	87.19%	51.74%
Cagayan Valley	2.48%	21.74%	89.66%	84.75%	51.08%
Cordillera Administrative Region	10.21%	30.90%	93.71%	78.58%	51.12%
Central Luzon	12.66%	32.14%	93.32%	92.26%	41.34%
National Capital Region	24.27%	40.05%	95.94%	95.58%	40.32%
CALABARZON	15.59%	36.20%	95.09%	89.76%	38.56%
MIMAROPA	3.38%	18.43%	87.86%	66.81%	23.24%
Bicol Region	3.45%	17.63%	86.92%	71.61%	43.46%
Western Visayas	4.54%	18.29%	88.40%	74.99%	52.37%
Central Visayas	8.11%	21.99%	87.83%	72.79%	44.65%
Eastern Visayas	3.18%	15.69%	80.29%	70.24%	32.76%
Zamboanga Peninsula	4.48%	15.29%	83.85%	63.58%	31.54%
Northern Mindanao	7.09%	18.89%	84.09%	71.27%	39.03%
Davao Region	7.90%	23.13%	84.49%	72.95%	41.86%
SOCCSKSARGEN	4.12%	15.82%	81.17%	64.33%	37.20%
Autonomous Region of Muslim Mindanao	0.34%	3.41%	75.33%	42.07%	24.77%
Caraga Region	3.36%	17.03%	83.28%	69.05%	24.99%
Philippines	9.77%	25.39%	89.22%	79.22%	40.49%

Source of Basic Data: Family Income and Expenditure Survey 2015. Estimates are weighted.

⁴ ARMM does not correspond to the provinces under the new Bangsamoro Autonomous Region in Muslim Mindanao.

The calculations from Table 2 present the percentage of households with schooling members in each region in 2015 with access to channels that can be used as alternative modes of delivery for learning. These channels include internet access, ownership of personal computers, cellphones, televisions, and radios.⁵ Surprisingly, only 9.77% of the 15.8 million households with schooling members in the country have paid for internet access in 2015. Almost majority of the regions have reported single-digit percentages as well. Meanwhile, while also an essential ICT infrastructure, only about 25% of households with schooling members in the country have at least one personal computer in 2015. On the other hand, the percentages of television and radio ownership among households with schooling members are relatively high among the regions compared to the other two channels discussed. Finally, the percentages of cellphone ownership among households with schooling members have the biggest values among all channels mentioned.

The table above also highlights one of the two critical factors that the education sector and the government must consider: that of geographical (dis)advantages. While not even 50% of households with schooling members in Metro Manila paid for internet access or had at least one personal computer in 2015, the region still has a significantly better access to these ICT infrastructures than other regions. In addition, all regions in the country report a significantly higher percentage of households with schooling members that own at least one television set, radio, and cellphone than households that pay for ICT infrastructures.

While the previous estimates show the geographical differentiation in terms of accessibility of the different channels that the government and the schools are currently considering or using to continuously serve the students amidst this pandemic, another key takeaway can be made in terms of accessibility by classifying the households with schooling members according to their per capita income quintile. Table 3 reports the percentage of households with schooling members in each per capita income quintile that own the channels previously discussed. The number of households with schooling members per income quintile is also reported in the second column of the table.

Table 3. Percentage of Households with Schooling Members with Access to Alternative Channels of Learning (by per capita Income Quintile)

Income Quintile	No. of Households (in 000)	Internet	Cellphone	Computer	Television	Radio
1 st Quintile (Bottom 20%)	3,800	0.16%	74.58%	1.44%	51.18%	31.50%
2 nd Quintile	3,394	0.80%	88.25%	5.96%	74.86%	37.53%
3 rd Quintile	3,152	3.77%	93.94%	18.83%	88.11%	43.68%
4 th Quintile	3,924	12.77%	96.62%	42.38%	94.76%	45.51%
5 th Quintile	2,537	40.15%	98.02%	75.85%	98.09%	48.20%
Philippines	15,806	9.77%	89.22%	25.39%	79.22%	40.49%

Source of Basic Data: Family Income and Expenditure Survey 2015. Estimates are weighted.

The estimates above show that for the bottom 20% households with schooling members, only 0.16% of them have paid for internet access in 2015. The same analysis for the first quintile holds for owning at least one computer, television set, and radio. If the bottom 40% households with schooling members of the country are considered only about 33,200 households paid for internet access, about 257,000 had at least one personal computer, about 4.5 million had at least one television set, and about 2.5 million had at least one radio in 2015. Though the computation is not straightforward, the same analysis can be applied for all the other quintiles as well. Moreover, one of the most significant insights from the table above is the significantly large percentage of households with schooling members that own at least one cellphone in all per capita income quintile groups.

⁵ Households with internet access were identified by using the observations on which households have internet expenditures in 2015. Meanwhile, households with access to cellphones, television sets, and radios were identified by using the observations on which households have at least one of these items.

Nevertheless, Table 3 highlights the vulnerability of students especially when their households are included in the bottom per capita income quintiles.

Implications and Recommendations

What are the policy implications of these basic data in the short run and the long run?

In the short run (that is, for the incoming school year), what we can infer at least from the 2015 data are the following scenarios and recommendations.

Firstly, a number of students might be left behind. This is true whether schools opt to deliver courses through online means only or schools decide to suspend the school year indefinitely (as how some are clamoring for this). In particular, students belonging in either or both households that are located in regions far from the center and are part of the lower income quintiles are more vulnerable to be left behind. Should the school year suspension be done, however, we are not assured that the supposed cohorts for the incoming school year will enroll again once schools return to normal operations.

Secondly, the government can push through with the DepEd recommendation to take advantage of the wider coverage of televisions and radios and reach as many households as possible to ensure continuous learning. Having media partners in doing so would definitely be more helpful. However, using these channels of delivery could only do as much. Online learning portals and repository of materials (such as the [online materials available in the Department of Education](#)) might be more effective in achieving the “[most essential learning competencies](#)” for learners than the other channels that the government is mulling to use. Certainly, there is a trade-off (as of writing) between reaching out to as many learners as possible and ensuring that the expected learning outcomes are met.

While the incoming school year poses serious challenges for schools and the government to ensure that no one is left behind, in the long run, policies must ensure that such difficulties will not happen in the future anymore.

In particular, the government must invest especially in digitizing the delivery of courses in the future not only to serve as an alternative should future shocks similar to this pandemic happen, but also as one of the means to deliver courses during normal times. But the success of this is contingent to the availability of ICT infrastructures for almost all households. For instance, the government, in partnership with the telecommunication companies, can take advantage of the wide coverage of cellphone ownership among households by ensuring that these households are within the reach of telecommunication services. Through this, households can have a possible source for internet connection as well as a channel for dissemination of course materials, as the case may be. However, the usage of modern technologies for teaching would also mean closing the skills gap of the educators in terms of adapting these technologies.

Nevertheless, the foundation of these considerations and recommendations rely on ensuring, as much as possible, that no student will be left behind either in the incoming school year or in the future. Assessing the feasibility of shifting to online modes of delivery would allow policymakers and schools to pinpoint the gaps in the accessibility of this mode which might make students capability-deprived of having a continuous learning experience. Highlighting the importance of having a continuous learning experience is not only due to their economic significance as human capital inputs in the future, but because people value having continuous access to education as well—education, here, not only becomes a means to an economic end but also is an end in itself.

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