

A stylized illustration of a desk setup on a dark blue background. In the center is a laptop with a screen showing a woman in a yellow dress pointing at a white background with small black plus signs. To the left of the laptop is a stack of three books. Below the laptop is a grey calculator. To the right of the laptop is a white pen holder with a grey base, containing three pens. Above the laptop is a white notepad with a blue border and a grey wavy pattern. Below the laptop is a stack of three blue folders or notebooks.

Basic Education during the COVID-19 Pandemic

What do Enrollment by Learning Modality and Household Characteristics Tell Us?

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Thursday, 27 July 2023 | 2:00 - 4:30 PM (Manila Time)



Outline of the presentation

01 INTRODUCTION

Objectives

Data and methodology

02 BASIC EDUCATION DURING THE PANDEMIC

Government responses

Household responses

03 REACHABILITY OF STUDENTS AND HOME SUPPORT

Access to the internet, TV,

Radio, and Phones

04 SUMMARY AND RECOMMENDATIONS



To describe the responses of the education sector to the pandemic



To explain the pattern of learning modalities used by students based on household data



To describe how the students reacted through their use of the offered learning modalities



Draw insights and recommendations to guide implementation of remote learning

DATA AND METHODOLOGY



DepEd's enrollment data by learning modality

Indicates the learning modality used by students by level and type of school

Distribution of learning modality used may be the result of:

- (a) the preferences and the capacity of students to benefit from the different modalities;*
- (b) the capacity of schools to offer the different modalities*

2020 Annual Poverty Indicators Survey (APIS)

Provides estimates of the non-income indicators related to poverty

The study uses household data on the availability of the technologies that enable students to avail of the different learning modalities (e.g., access to the internet, TV, radio, and cell phone), and enrollment data by level and type of school

This study did a regression analysis to provide estimates on the correlates between having internet at home and the availability of broadband -> can help explain the availability of internet at home



Basic Education Learning Continuity Plan (BE-LCP)

- Issued in May 2020, this guided the education sector's response to the pandemic
- Identified several learning delivery modes, including
 - 1) *face-to-face in areas where there are low risks;*
 - 2) *distance learning modes by print, online, TV, and radio;*
 - 3) *blended learning - combines face-to-face and distance learning;*
 - 4) *homeschooling (DepEd Department Order 12)*
- **Most Essential Learning Competencies** - Streamlining of the K-to-12 curricula from 14,171 competencies to 5,689 or a reduction by 60 percent

Republic Act 11495*Bayanihan to Recover as One Act*

- **Authorization given to DepEd to hire learning support aides (LSAs)** – teacher-assistants for the production or reproduction of modular learning materials for K-12 (Section 4)
- Allocated PHP 4.35 billion to basic education (DepEd) assigned as follows:
 - 1) *Laptops for teachers – PHP 2.4 billion*
 - 2) *Internet connectivity load – PHP 1.2 billion*
 - 3) *DepEd TV and Radio – PHP 300 million*
 - 4) *Subsidies and allowances – PHP 300 million*
 - 5) *Learning modules – PHP 150 million*

Department Orders*Issued by the Department of Education*

to further guide the implementation of BE-LCP:

Department Order 31 s.2020

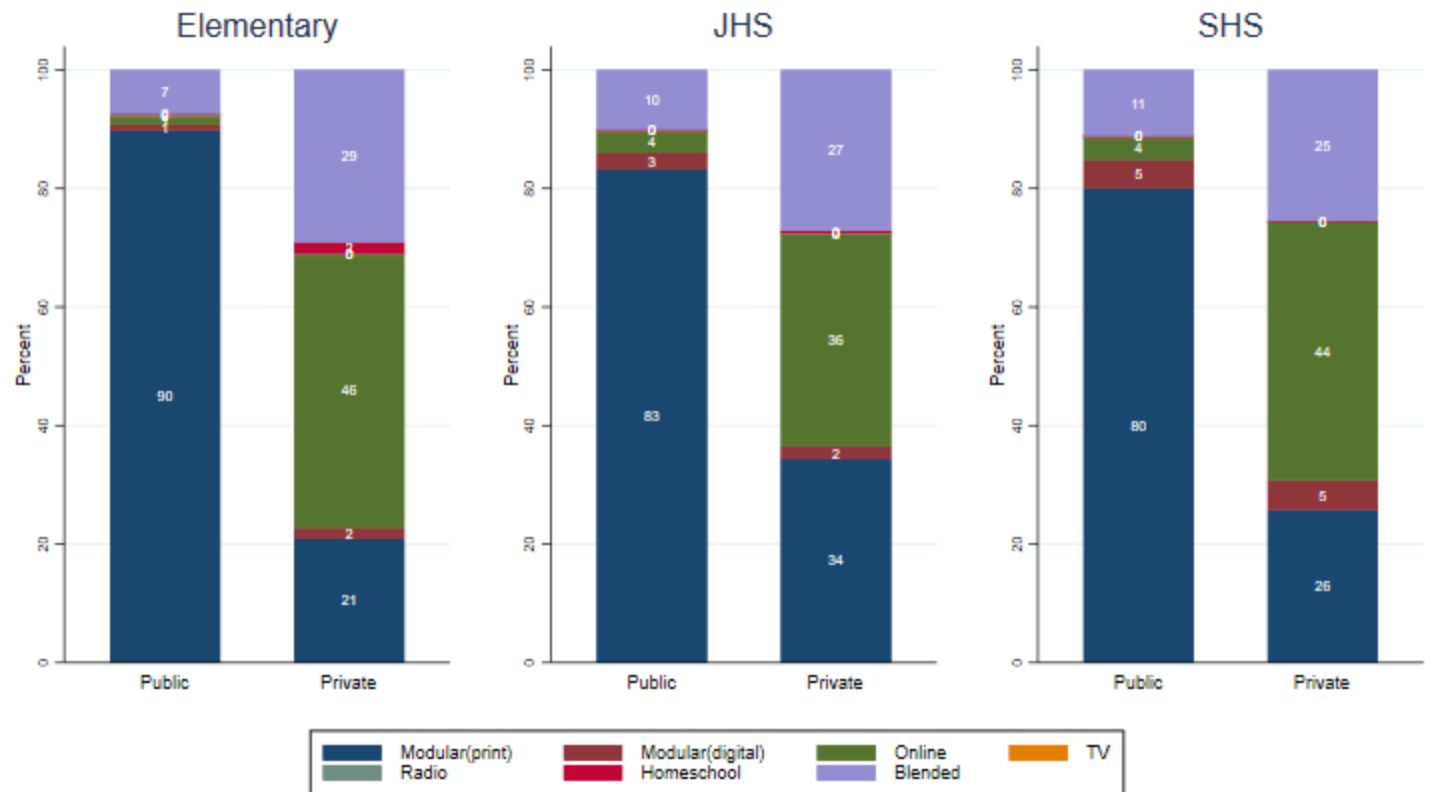
Provides guidelines for assessment and grading - reminds teachers to be flexible and “set realistic expectations”

Department Order 32 s.2020

Provides guidelines on the utilization of LSAs – should be senior high graduates or have completed at least two years of college

- More students in private schools use **online learning**, while public school students rely mostly on printed modules
- Blended learning** is also popular in schools where the online mode is largely availed - might be because of the unreliable internet connection
- Neither **TV** nor **radio** figured prominently as the mode of delivery utilized by students in public and private schools

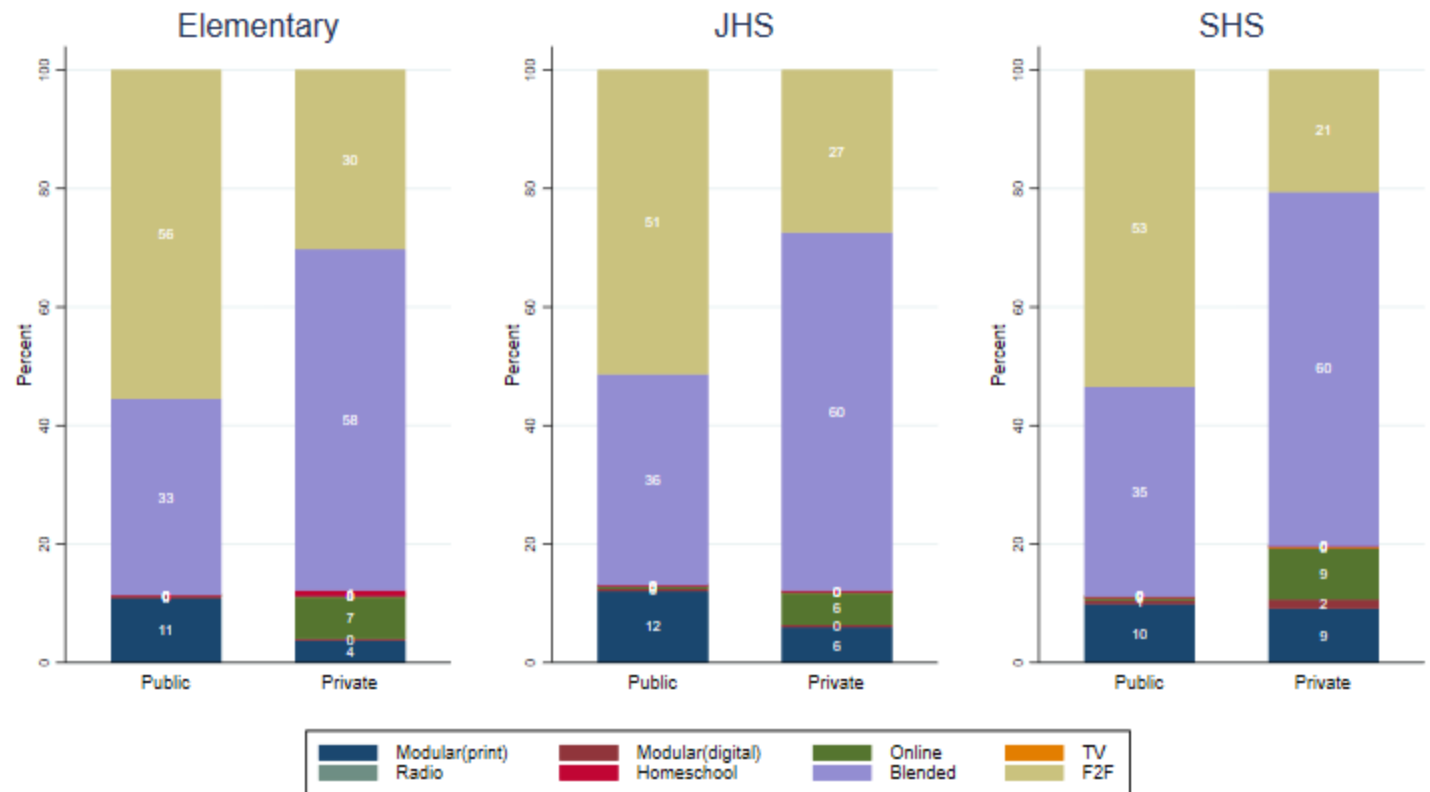
Distribution of student by level, type of school, and mode of learning, SY 2020–2021



Public includes SUCs/LUCs

- In SY 2021-22 (not shown)
 - More of the same as in SY 2020-21
- In SY 2022-23
 - More of public-school students are in F2F than in private
 - There is more in the blended mode in both public and private, more so for private
 - The proportion in online mode in private schools declined to single digits
 - At least 1 in 10 in public schools are still on printed modules

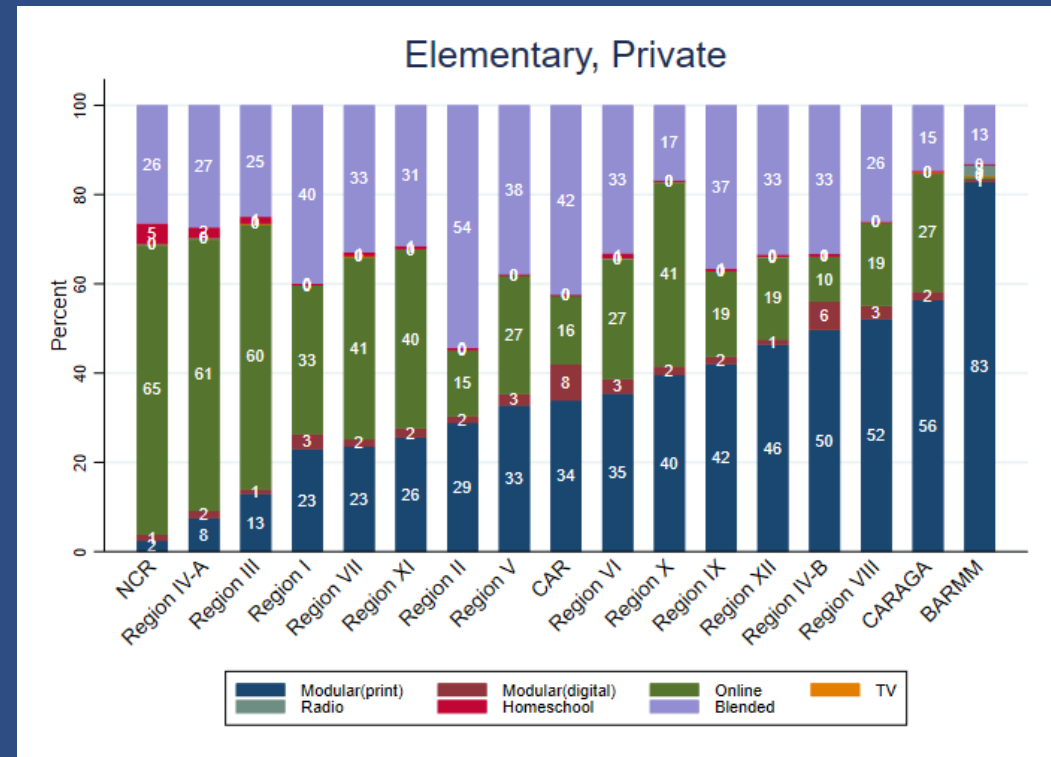
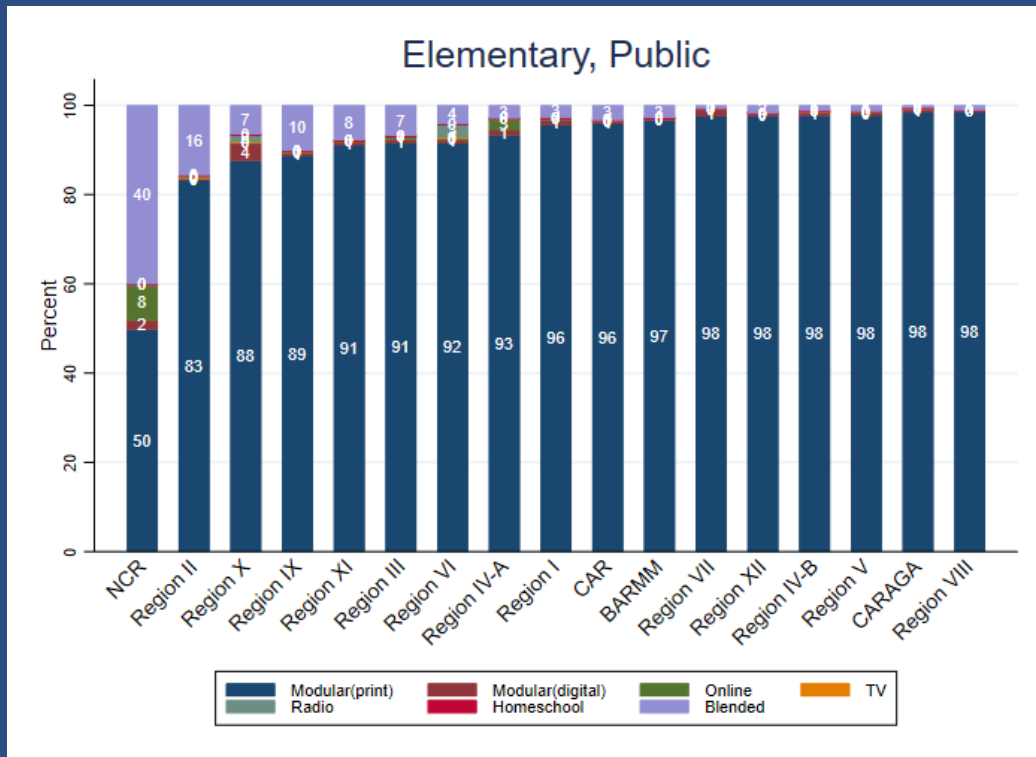
Distribution of student by level, type of school, and mode of learning, SY 2022–2023



Public includes SUCs/LUCs

- In SY2020-21, most public elementary students are in printed modules; only NCR has some students in online mode
- A considerable proportion of private elementary students are in online mode, e.g., NCR, 4-A, 3; many are also in printed modules such as BARMM, Caraga, 8,4-B

Distribution of elementary students by learning modality, by type of school, and by region SY 2020-2021

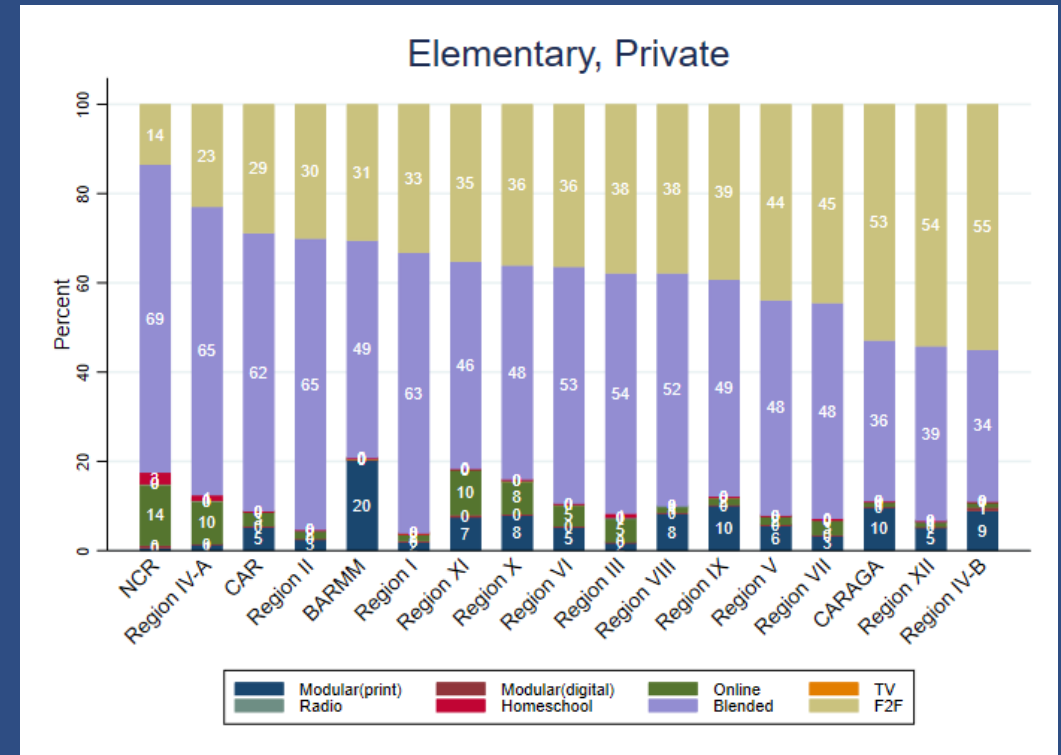
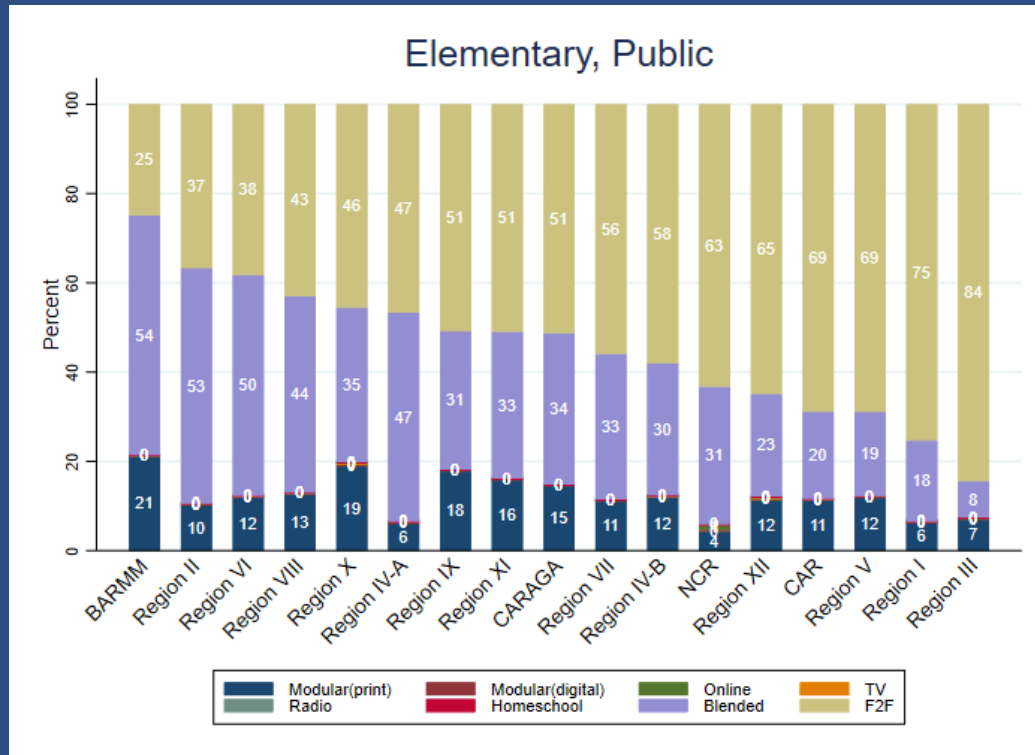


HOUSEHOLD RESPONSES

Distribution of mode of learning by region - Elem

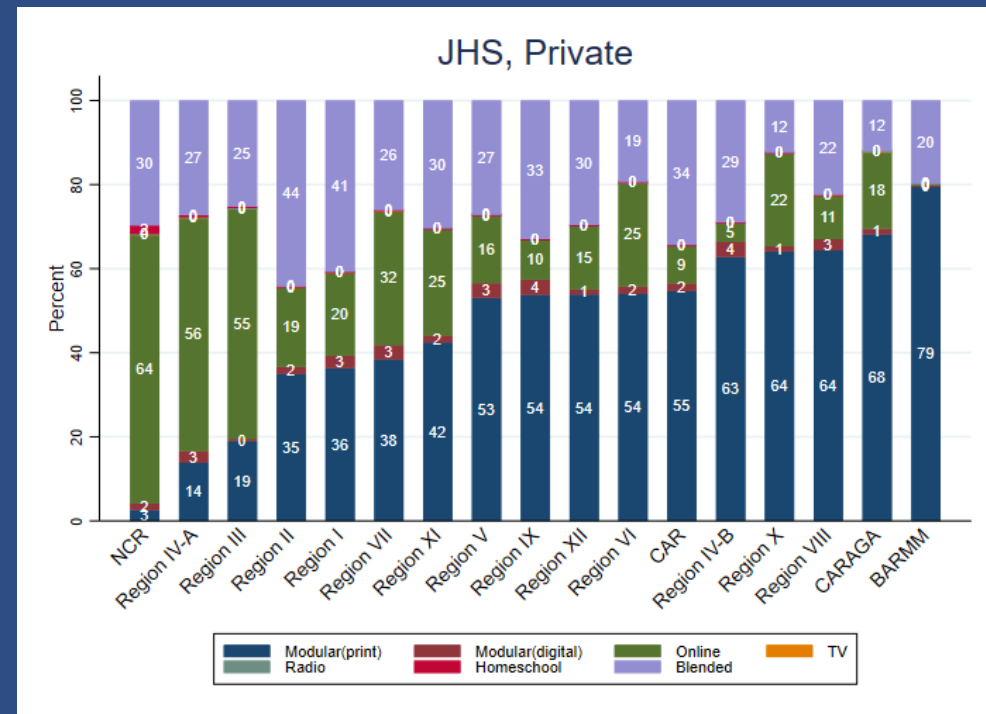
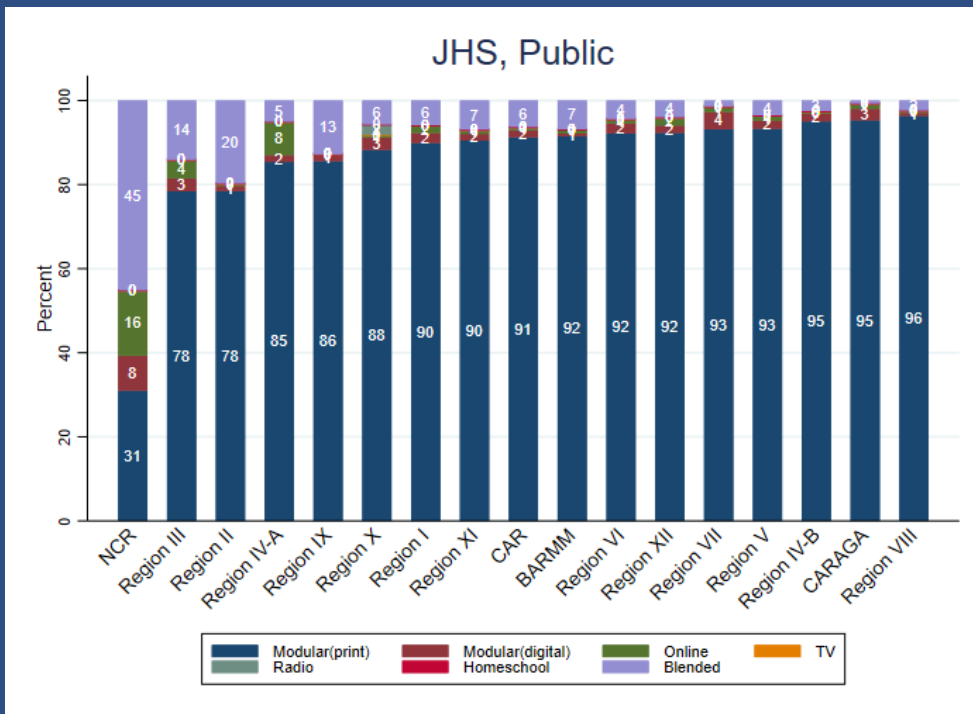
- In SY 2022-23, the **public elementary schools in most regions have the majority of students in F2F**; those that are not are in blended mode
- For private elementary students, only a few regions (4-B, 12, Caraga) have a majority in F2F; **more regions have a majority in blended mode.**

Distribution of elementary students by learning modality, by type of school, and by region SY 2022-2023



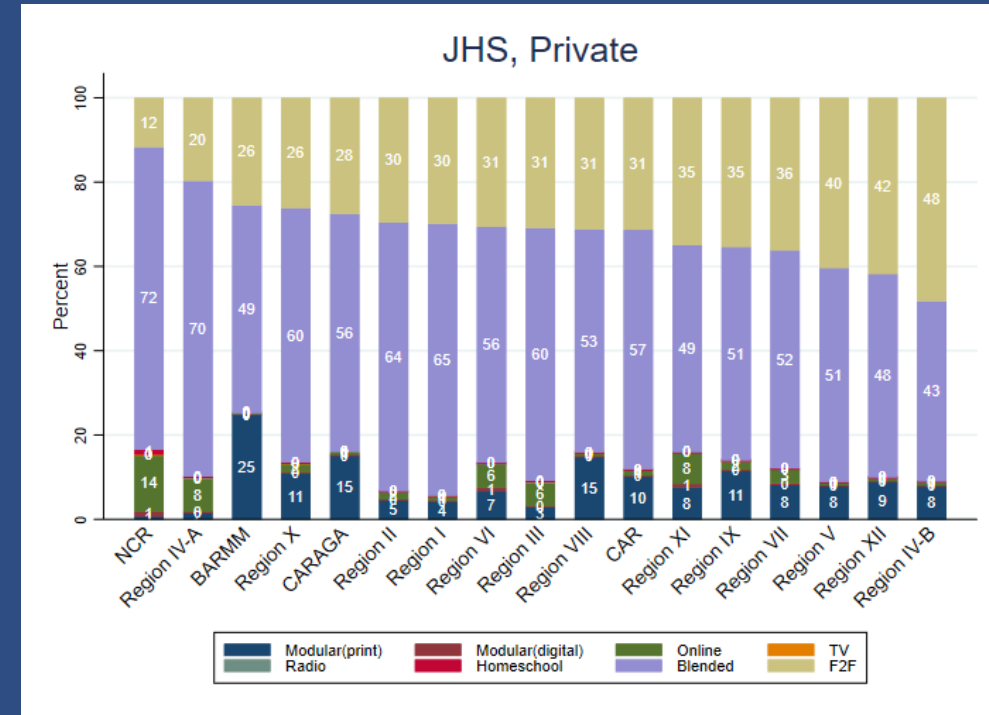
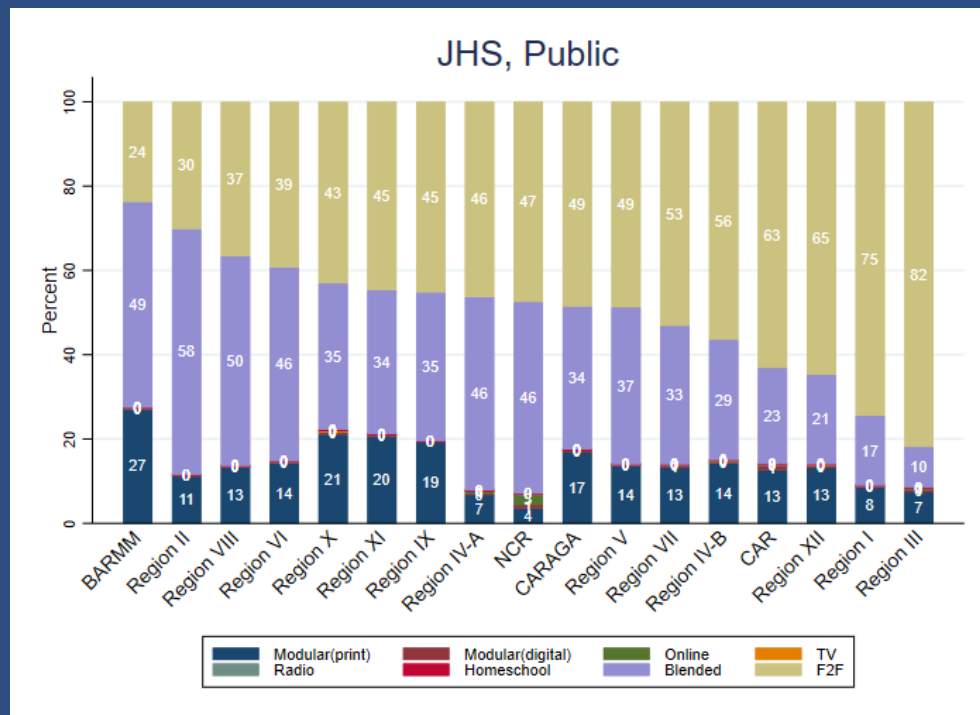
- In SY 2020-21, public school students for all regions are mostly using printed modules – except for students in NCR, where there is considerable proportion in blended and online modes.
- Private schools have a sizeable no. of JHS students using online and blended learning modes - in NCR, 4-A, and 3, online mode is the majority group; while the majority are in printed mode in BARMM, CARAGA, 8, 9,4-B,CAR,6,7,9,5

Distribution of JHS students by learning modality, by type of school, and by region SY 2020-2021



- In SY 2022-23, public JHS students have shifted to F2F while a considerable proportion are in blended mode comprising the majority in 2 and 8
- Private JHS students have shifted to F2F, but there are more in blended modes for most regions except Regions 11, 12, and 4-B; the proportion online has declined to single digits except for NCR

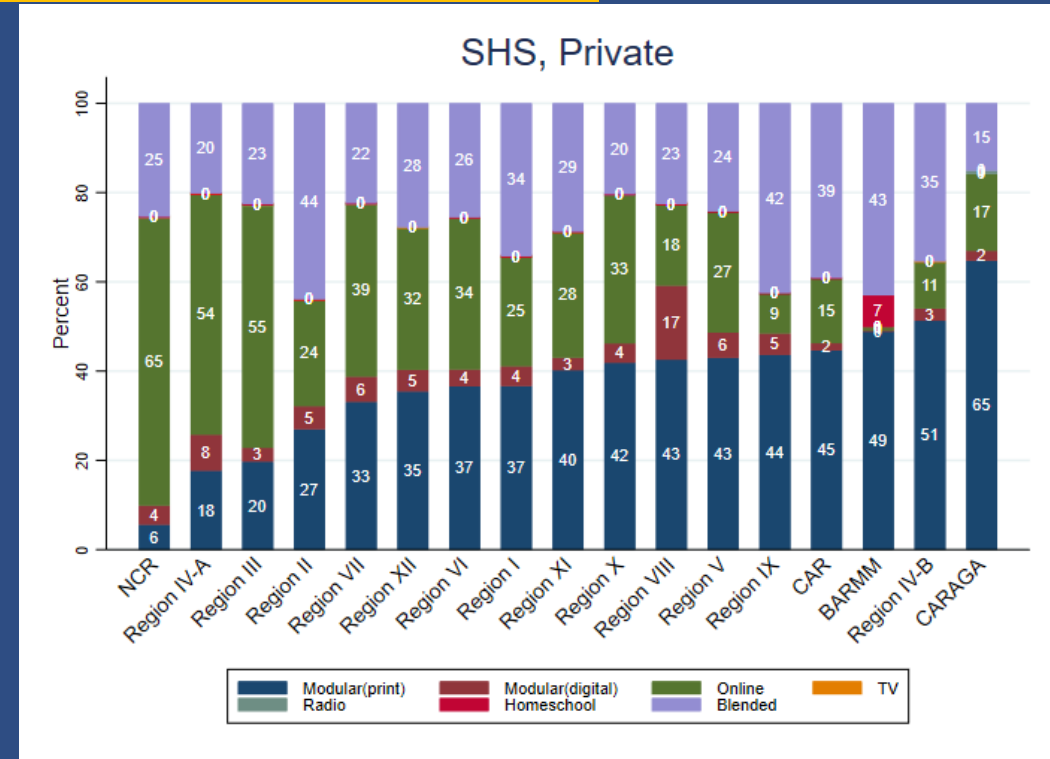
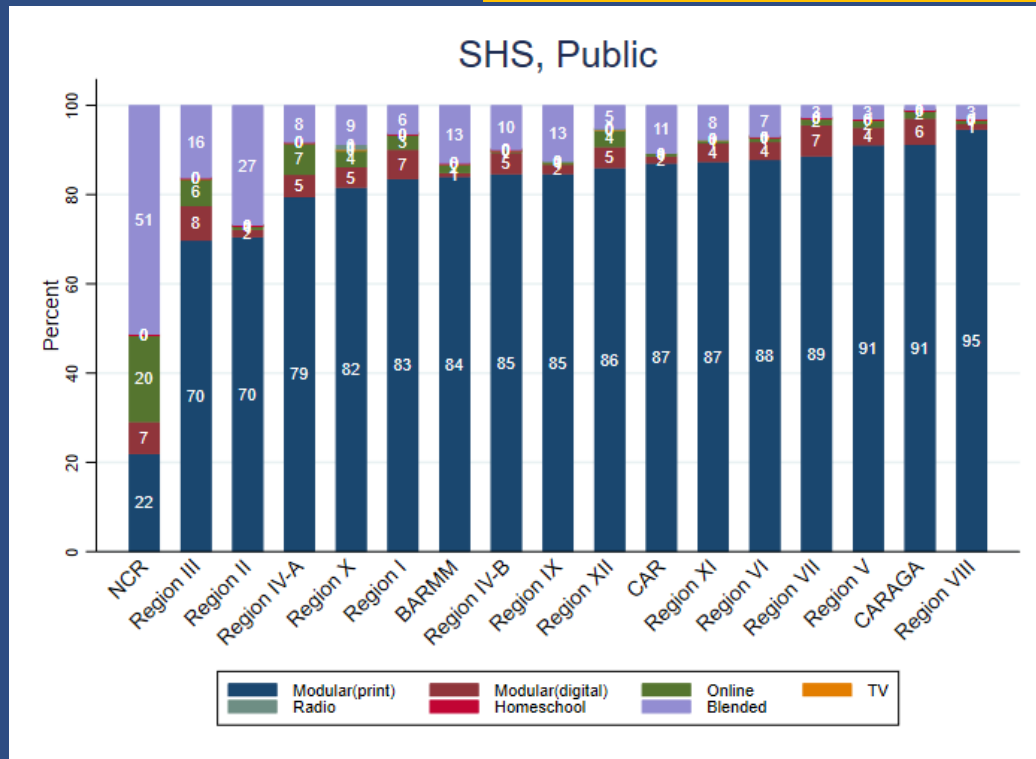
Distribution of JHS students by learning modality, by type of school, and by region SY 2022-2023



- Similarly, in SY 2020-21, public SHS students are in **printed modules**; only in NCR have a considerable proportion in online and blended mode.

- A considerable proportion of private SHS students are in **online mode**, particularly, NCR, 4-A, 3; those in paper modules are the majority in CARAGA, 4-B.

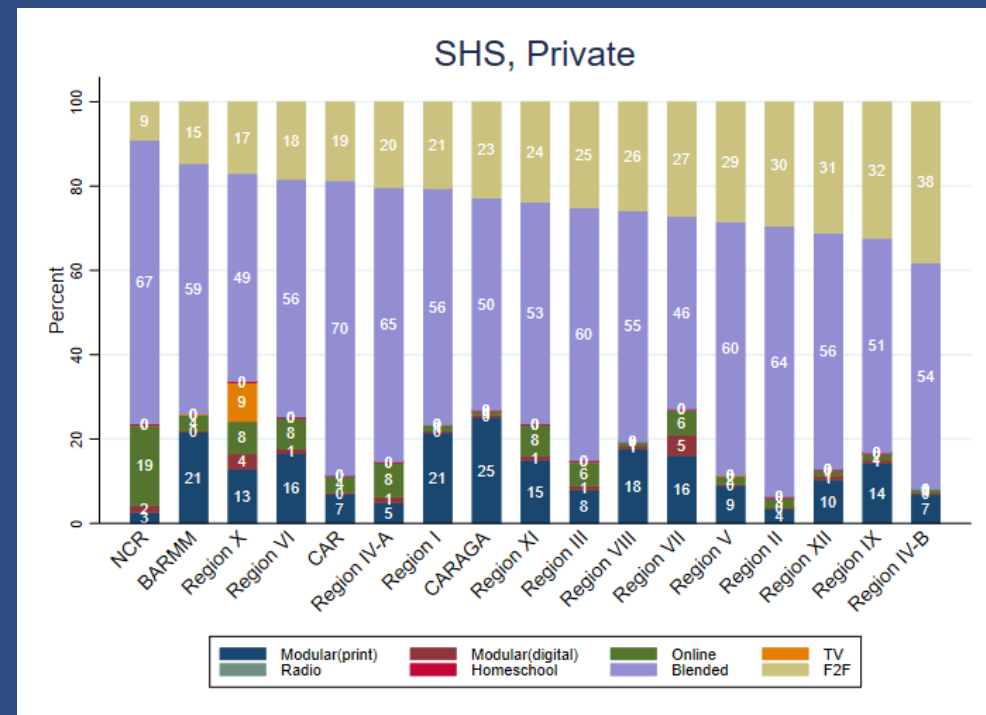
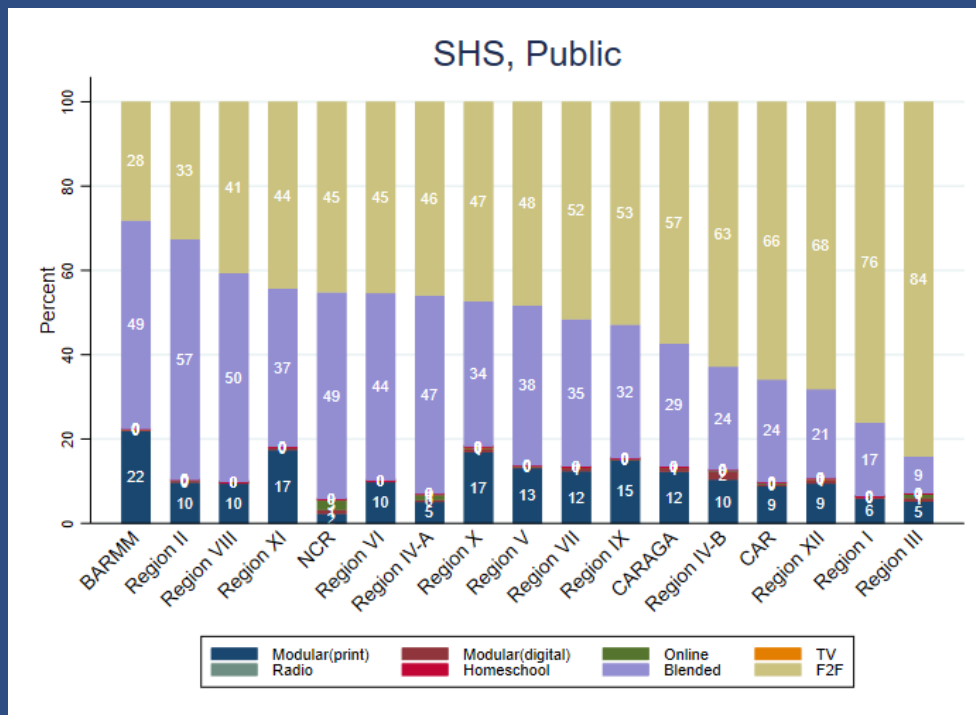
Distribution of SHS students by learning modality, by type of school, and by region SY 2020-2021



- By SY 2022-23, the **majority of public SHS students are in F2F** in regions VII, Caraga, IV-B, CAR, XII, I, III; those in blended mode are the majority in 2, 8.

- For private SHS students, the **majority are in blended modes** for most regions, and those on F2F have not reached 50% of the students.

Distribution of SHS students by learning modality, by type of school, and by region SY 2022-2023



Reachability of students under remote learning modalities

“the share of school children that can be potentially reached by remote learning policies adopted by governments to ensure learning continuity in a country” – Avanesian et al. (2021, p.3)



**HOME INTERNET
ACCESS**



**HOME ACCESS TO TV
AND RADIO**



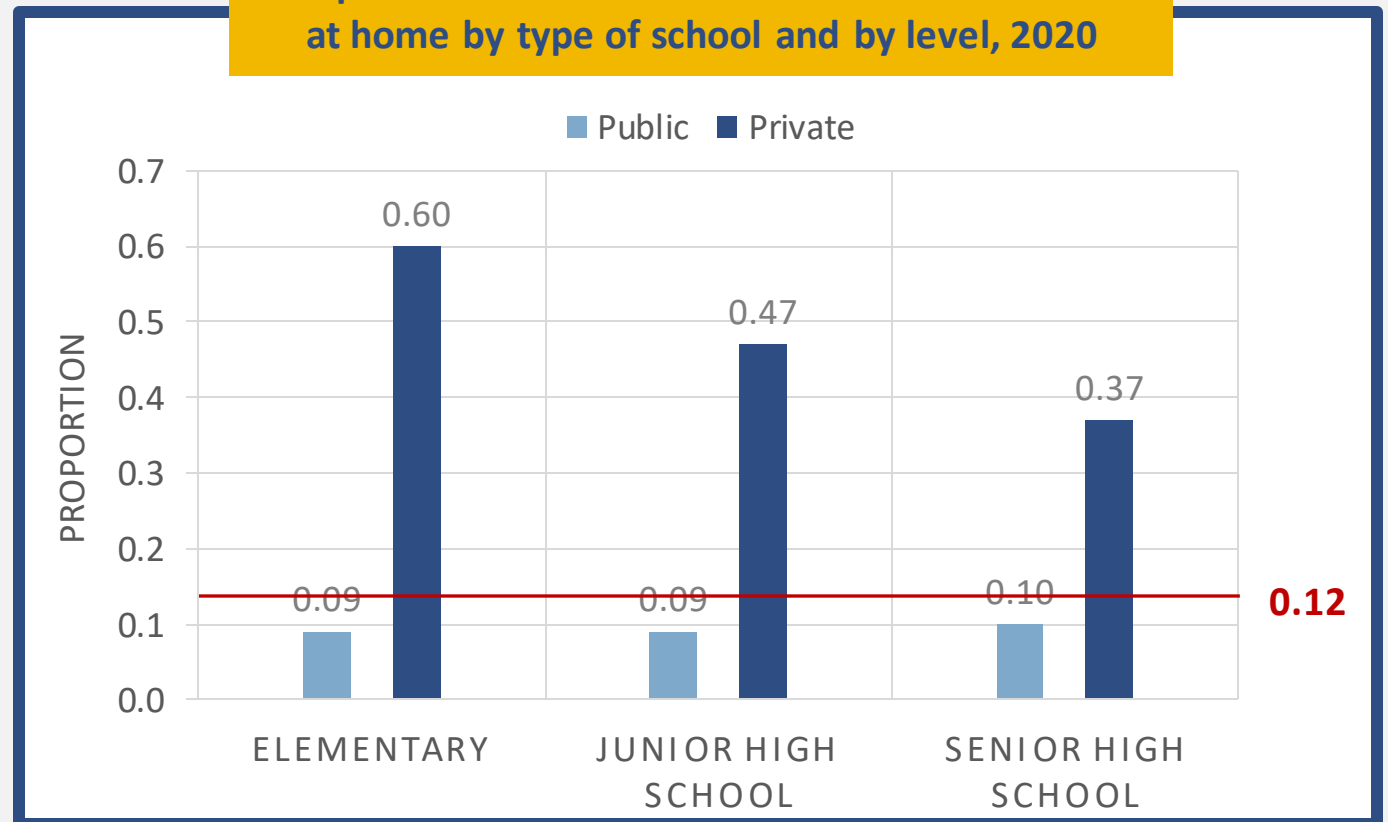
**ACCESS TO CELL
PHONES**

Reachability of students under remote learning modalities

Home Internet access by students

Access to the internet is significantly **higher among students in private schools** than students in public schools – consistent across region

Proportion of students with Internet connection at home by type of school and by level, 2020



Reachability of students under remote learning modalities

Home Internet access by students

Correlation of connectivity to broadband at home

Most important correlate is the **presence of broadband infrastructure** followed by the variables: income, family size, and either parent having a high school education

Regression of internet availability and household characteristics

Variables	Standardized Coefficient
Log monthly per capita income	0.3430***
Family size	0.1891***
Parents have HS education	0.1132***
In urban	0.0786***
Male head	-0.0392***
Log age of head	0.0401***
Head working	-0.0000
Prop of family are children 6-11 years old attending elementary	-0.0024
Prop of family are children 12-15 years old attending HS	0.0032
Presence of broadband infrastructure	0.4536***
Observations	41,839

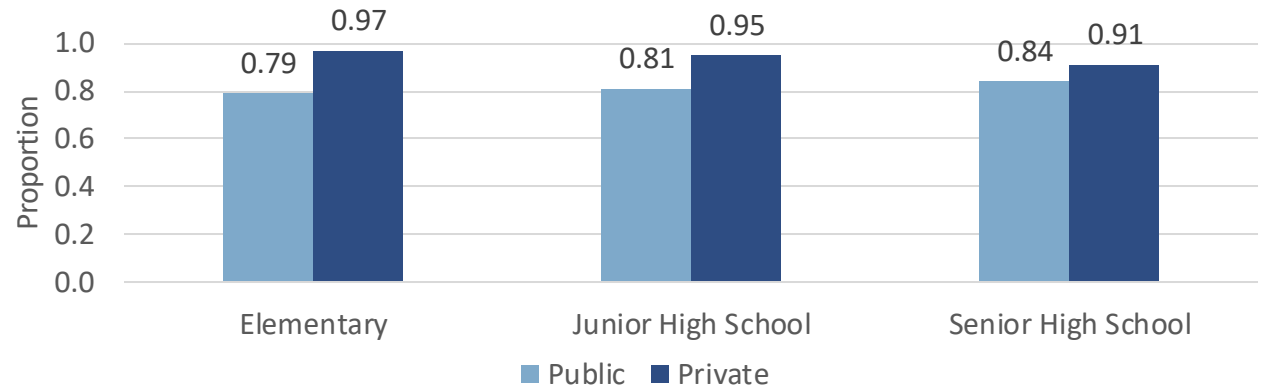
Note: * $p < 0.5$, ** $p < 0.01$, *** $p < 0.001$

Reachability of students under remote learning modalities

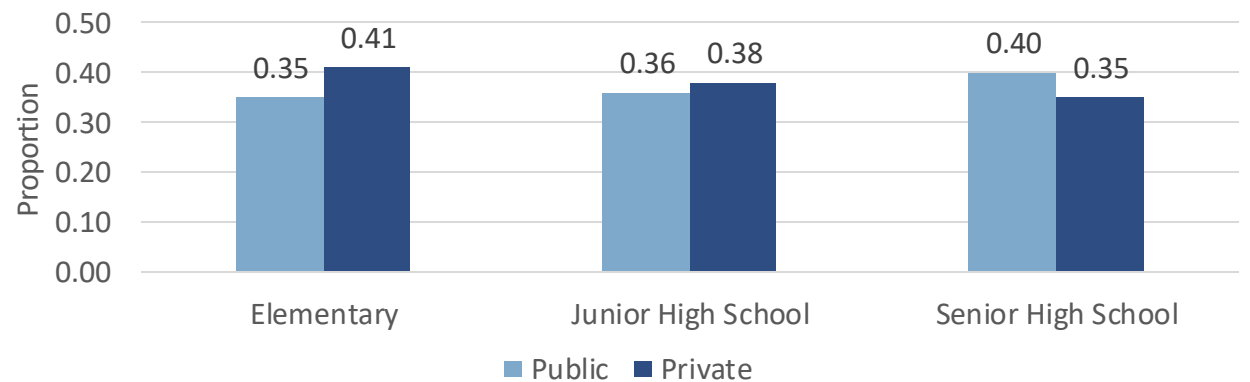
Home access to TV and Radio by students

- **Disparity is not wide** between public and private school students across all levels
- **High proportion of students have TV (above 79%) and radio (above 35%)** at home (however, the data on enrollment by modality do not show a commensurate proportion of users for these modes)

Proportion of students with access to TV by type of school and by level, 2020



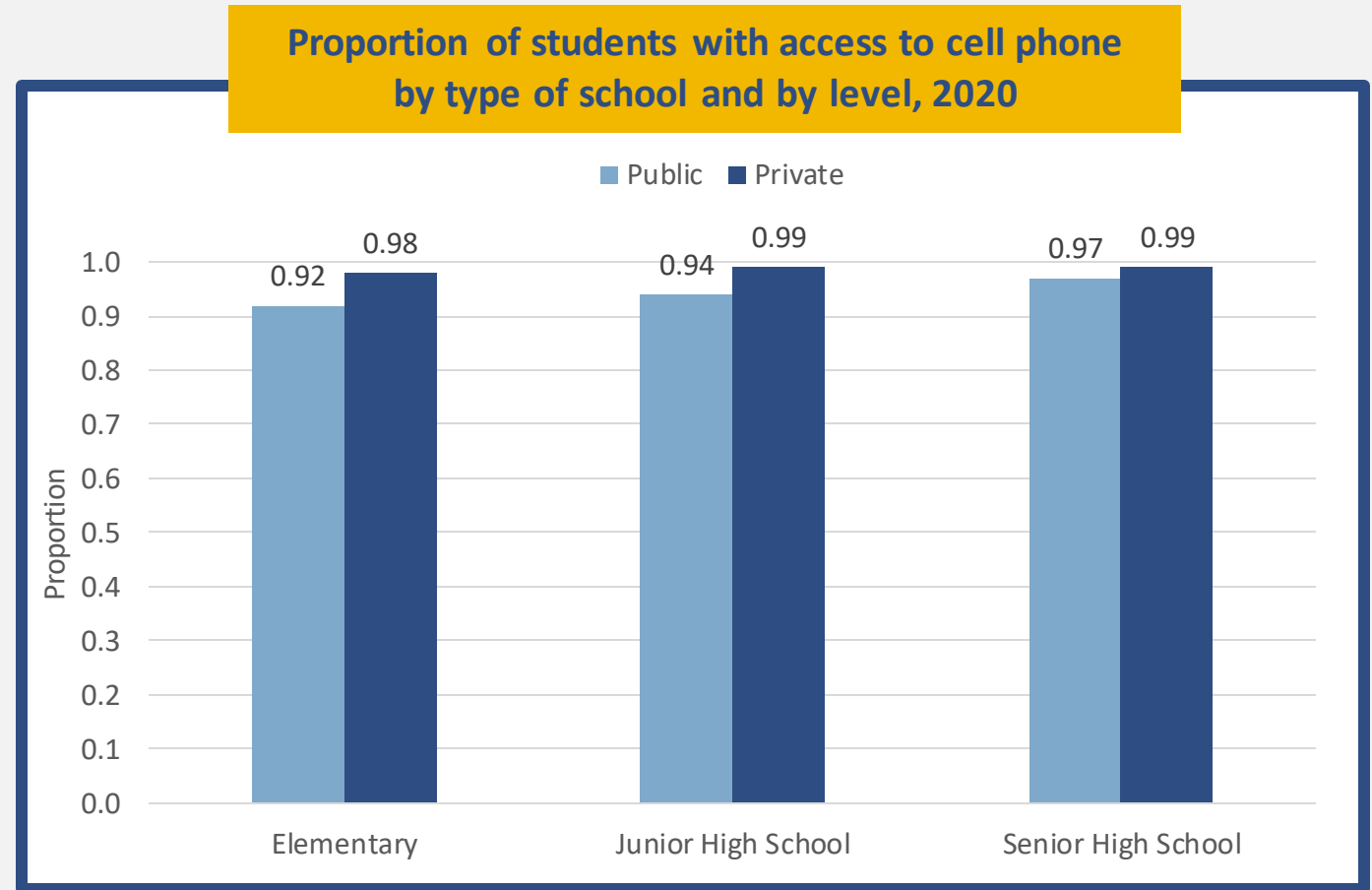
Proportion of students with access to radio by type of school and by level, 2020



Reachability of students under remote learning modalities

Access to cell phones by students

Near-universal access to cell phones; no significant disparity in access between public and private school students

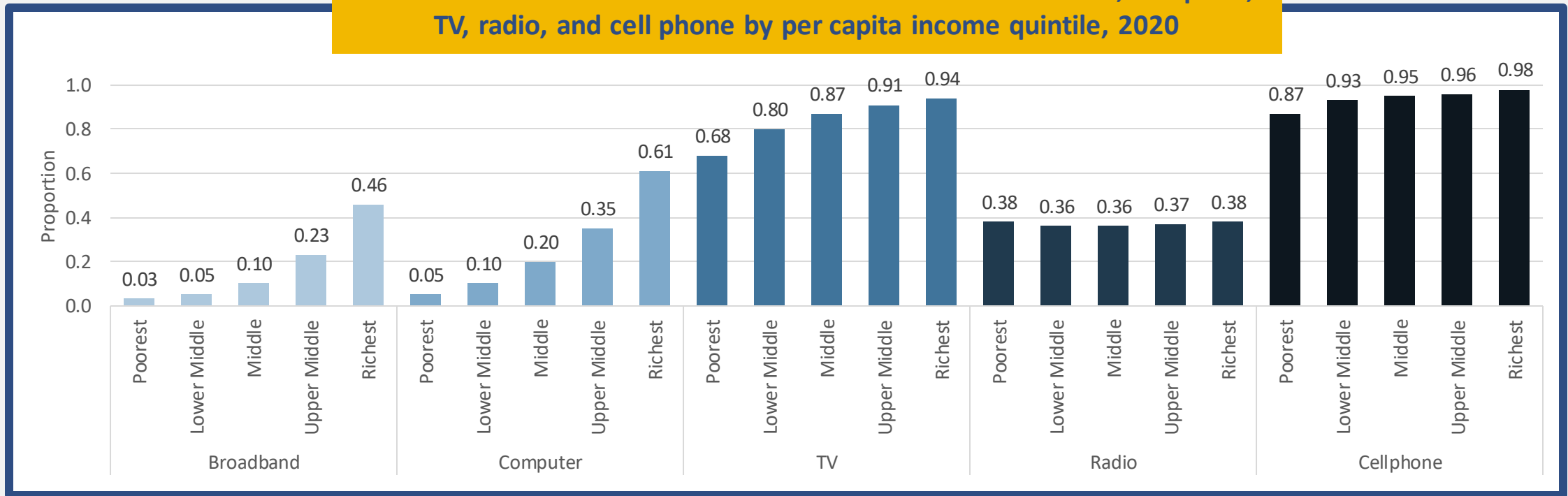


Reachability of students under remote learning modalities

In relation to socioeconomic status

Disparity in reachability by income class shows a wide gap in the access to the internet and having a computer and TV compared to radio and cell phone

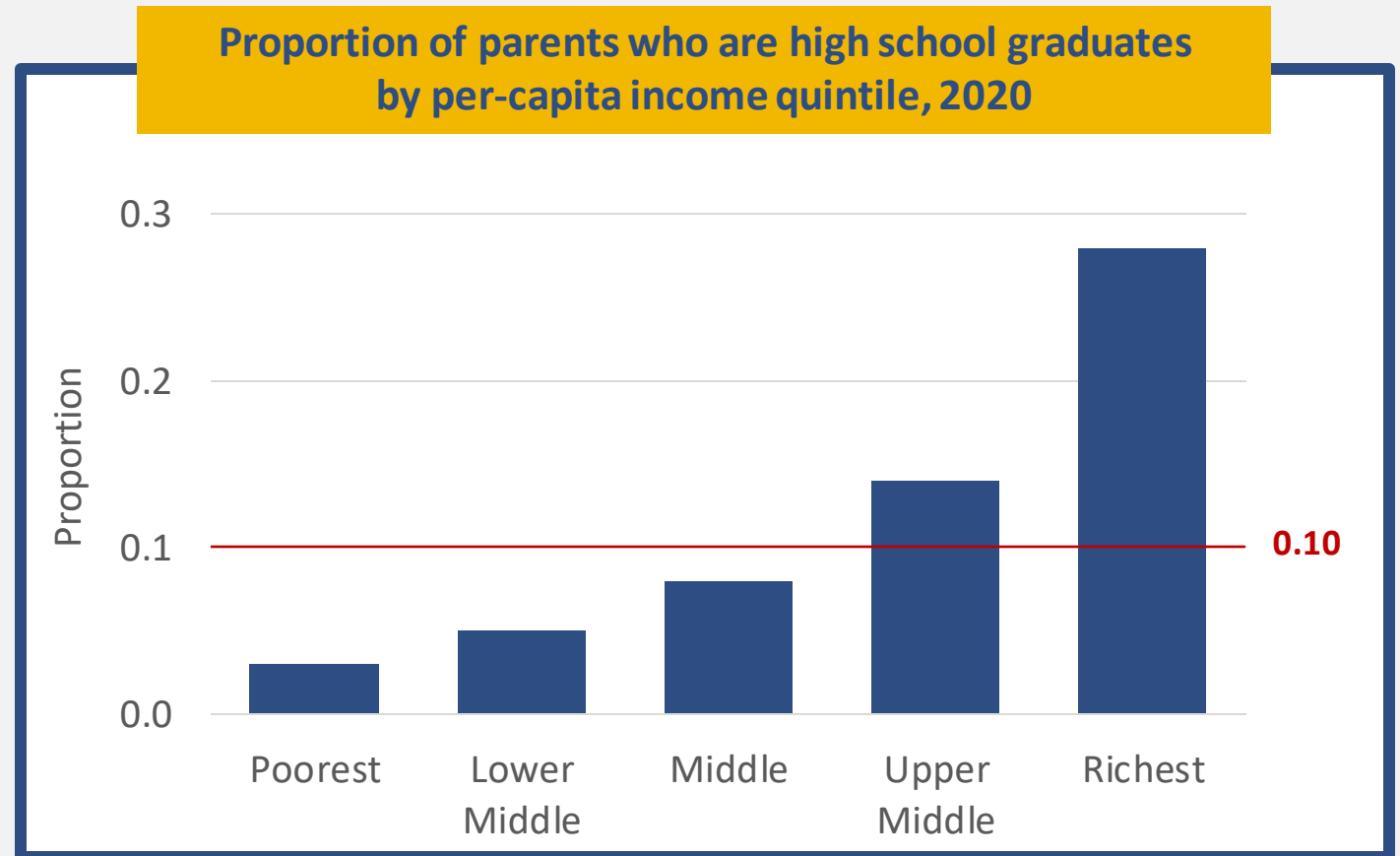
Distribution of households with access to broadband internet, computer, TV, radio, and cell phone by per capita income quintile, 2020



Home Support

Home support greatly influences students' learning attitude, self-regulation, and intrinsic motivation (OECD 2020)

- Quality of home support is **affected by the availability and the ability of parents** to support their children's education needs (i.e., level of parent's education)
- **Quality is lower among children in more impoverished families**



SUMMARY

- 01 Most of the students in public schools use printed modules for all levels of basic education—elementary, JHS, and SHS
- 02 Only in private schools does one find a considerable proportion of students on online and blended learning
- 03 There is significant disparity in internet access at home between students enrolled in private and public schools across all education levels

- 04 The availability of the internet at home is correlated to the presence of broadband infrastructure in the area and income
- 05 The availability of TV and radio is high but not reflected in mode of learning used; there is not much difference between public and private school students – also true for cell phone with even higher availability
- 06 The distribution of households where either parent a high school graduate also shows a wide disparity across income quintiles

Recommendations and insights



Online mode of learning will not reach most public-school students

- Even if made available in public schools, most students do not have access to it at home
- The desire to build online learning capacity in public schools will not be the most effective intervention at present



Primary and exigent concern is to support learning of the most popular mode - printed modules

- As the most popular mode of learning, it is critical to support printed modules
- Support may include provision of cell phones and cell phone load to improve interaction among teachers, students, and parents



Education delivery through TV and radio needs to be improved

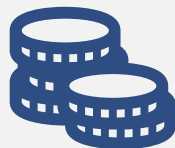
- Despite high proportion of households owning TV and radio, enrollment data by modality does not show commensurate use of these modes of delivery
- Issues that prevent greater use of these broadcast modalities need to be identified and addressed

Recommendations and insights



Address the disparity in the quality of home support by socioeconomic class

- In the absence of teachers, home support is critical in students' learning – more acute the younger the student is
- Use of Learning Support Aides (LSAs) to provide targeted learning support at home particularly for households with lowly educated parents needs to be explored



Address learning disparity by socioeconomic class expected with remote learning

- Home conditions of more impoverished families is expected to be less conducive for learning
- Underscores the importance of:
 - (i) *enabling greater interactivity between teachers, pupils, and parents using printed modules; and*
 - (ii) *Providing home support for children of lowly educated parents*



Recognize the need for remedial measures to address low test scores – even before the pandemic

- Low average test scores in the recent PISA and TIMSS and the call to focus on quality through *Sulong Edukalidad and MATATAG* highlights the need for massive remedial measures
- Emphasis on students from low-income households

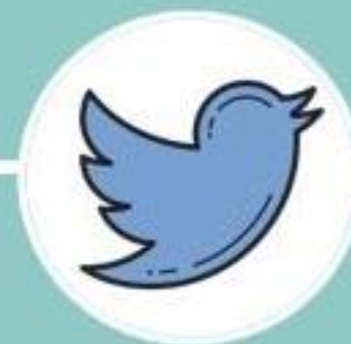
Thank You!



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