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Out-of-School Children: Changing Landscape of School Attendance and Barriers to Completion

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Abstract

From 2012 to 2015, the Philippine Institute for Development Studies (PIDS) released a full report, two discussion papers, and two policy notes on Out of School Children (OOSC) in the Philippines. These PIDS papers examined the magnitude of the problem, comparative trends across subgroups of location, sex, and income group of their families, as well as the various possible causes of OOSC. The OOSC statistics from this PIDS-led country study came from national surveys in earlier years, largely the waves of the Annual Poverty Indicator Surveys from 2008 to 2013, as well as from administrative data from the Department of Education, chiefly the 2008-2014 Basic Education Information System. The current study aims to: obtain estimates of out of school (both in magnitude and rates); profile OOSC and their families, as well as provide a discussion of the reasons why these children are out of school, and what makes children at risk of dropping out of school; and, discuss and recommend policies to reduce OOSC in the country. The OOSC estimates were generated before the full roll-out of K-12 program that mandates kindergarten, as well as adds two extra years (of senior high school) in basic education. In this context, this current study updates information about OOSC from household surveys and DepED administrative data, partly to assess the degree to which the government has been able to close gaps in education access and completion while at the same time extending its mandate through the K-12 Law. In order to gain a full picture of the problems faced by current OOSC, results of unstructured interviews with parents, school educators, and administrators are also discussed. Large reforms and expansion of the DepEd's budget, coupled with the government's conditional cash transfer program have made significant changes in the OOSC picture, and brought down the magnitude of OOSC especially among the poor. In addition, the full support placed on the Alternative Learning System in the last administration has brought undereducated Filipinos back to school. Now that there has been at least 3 years since the reforms have been emplaced, the nature of the remaining OOSC has changed in terms of reasons for leaving school and thus, the necessary interventions to address potentially more challenging barriers to schooling. Special attention is placed on an examination of, the often-cited survey response about the lack of interest in schooling, gender disparities in school participation as well as supply-side barriers especially teacher workload. The paper provides concrete recommendations for addressing both demand- and supply-side bottlenecks to schooling.

Keywords: out of school children (OOSC), gender, poverty, participation rate, OOSC rate, drop-out rate

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Clarissa C. David, Jose Ramon G. Albert, and Jana Flor V. Vizmanos¹

1. Introduction

The first report and series of papers on Out of School Children (OOSC) aged 5 to 15 by PIDS was released from 2012 to 2015. Together, these papers discussed a broad array of research results about the magnitude of the problem, comparative trends across subgroups of location, gender, and income, as well as in-depth investigations of the various possible causes of dropouts and failure to attend formal schooling. Global data suggests that the number of OOSC across the world fell steadily in the decade following 2000, but this progress stopped in recent years (UNESCO-UIS 2017). Many of these earlier estimates for the Philippines were generated prior to the full rollout of Senior High School, in the current academic year the first classes of K-12 students are graduating and entering college or the workforce. In this context, an update to the OOSC report is timely, to assess the degree to which the government has been able to close gaps in education access and completion while at the same time extending its mandate through the K-12 Law. In this update we aim to: (1) examine current estimates of out of school children (both in magnitude and rates) nationally and sub-nationally based on the most recent available survey and administrative data; (2) throughout qualitative interviews, profile OOSC and their families, as well as provide a discussion of the reasons why these children are out of school, and what makes children at risk of dropping out of school, and (3) discuss and recommend policies to reduce OOSC in the country.

As in the previous OOSC reports, we conducted a desk review of administrative data from the Department of Education (DepED), as well as results of sample surveys, chiefly the Annual Poverty Indicator Survey (APIS) conducted by the Philippine Statistics Authority. We also conducted a desk review of DepED initiatives to address the OOSC problem in the country. Further, we supplemented this examination with an analysis of new primary data collected from select field interviews.

DepEd Initiative Programs and Protocols to Reduce Dropouts and OOSC

The DepEd has multiple programs and processes designed specifically to reduce dropout rates and by extension, the incidence of OOSC. These are the Alternative Deliver Modes (ADMs), Open High School (OHS), and the ALS. The first two are delivered within the formal school system, when students are within school-age, and the ALS is targeted to learners who are adults or beyond school age and delivered by mobile teachers who report directly to the school division.

Prior to entering any of the three programs, teachers' usual protocols for students at risk of dropping out consists of (1) identifying students at risk by assessing absenteeism and academic performance, (2) speaking with the child directly and counseling them on the need for regular

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attendance and to assess the source of the absenteeism, when warranted (3) attempting to speak with the parents through a meeting in school, and finally when all the prior steps fail, (4) doing a home visitation where teachers go to the home of the student to speak with the parent to encourage them to compel the student to return to school or attend regularly. There are points in this process where the case may be referred to the guidance counselor or the principal, for example, if there is abuse or if there are disciplinary problems. Otherwise, teachers attempt to address this themselves, and when the normal steps prove insufficient to address the problem, the student is referred to one of the three programs.

Alternative Delivery Mode (ADM). The ADM is not designed just to catch children at risk of dropping out, it is a manner of modularized learning and teaching that will allow the school to adapt to temporarily changed conditions such as natural disasters or conflicts. ADM allows the child to not have to attend school everyday, but still follow the calendar of the regular school year by doing self-study at home, for individual children with circumstances that place them at risk of extended absence, ADMs provide a temporary relief from that. These are of use for situations of seasonal employment, family separations, income shocks to the household, or similar other unforeseen but temporary situations.

Open High School (OHS). As opposed to ADMs, which is a temporary arrangement, OHS is an extended program of high school where students are not required to attend classes daily (usually 2 days per week or four half days) but can graduate with a formal schooling degree from a public high school. OHS takes longer to complete, as much as twice the normal period for a student to complete one academic year but requires no equivalency exam at the end of the program. It is run by the same teachers in the formal high school and is based at the same school. Not all high schools offer OHS. Principals and teachers in schools where the program is available review it positively, saying it gives the students who are having difficulty coming to class daily to stay in school, especially those who are motivated and are otherwise high performers. Students in these programs are usually teen mothers and students who have to work. OHS is only available to those who are at or only 1-2 years beyond the formal school age. If they are older, they are referred to ALS. OHS is not available in all high schools and the requirements, support structure, and mechanisms for starting OHS programs remains unclear.

Alternative Learning System (ALS). The current DepEd administration had selected ALS as its flagship program and had since subjected the program to further study and governance structure changes. ALS is not a new program but had previously been limited in scope. It is targeted toward adults who failed to complete basic education and would like a chance to complete it without having to go through the formal schools. Delivery is done through ALS teachers or coordinators, of which there are a handful in each Division. They report to the Division office and are not based in a school. ALS coordinators are provided a working budget or allowance which they use to recruit students, run the classes, travel to the sites where classes are held, and provide all learning materials and other supporting materials. Most of the ALS programs we had visited receive generous support from local government units (LGUs) from the Mayor's offices to the barangays, the local schools which offer classrooms, and from private donors.

ALS is a non-formal learning system that aims to address the education needs of, among others, adult learners who did not complete the education cycle (i.e. school leavers) and OOSC who do not want to re-enter the formal system. Most ALS learners are adults who are working at home or in paid employment, many learning sites are in remote rural areas, or very poor urban neighborhoods. The program benefits from support in a formal way from DepEd, but also from

other sources of funding and in-kind support from LGUs, NGOs/CSOs, and local community volunteers. For learners, the ideal progression is to complete an ALS course, take an equivalency exam, and get a "degree" equivalent to primary or secondary completion. Depending on level, the ALS equivalencies can qualify learners to enter technical and vocational institutions, as well as tertiary education.

There are divisions with large-scale operations of ALS, as many 200 ongoing students in a division at any given point in time. Typical students are household helpers, vendors, stay-athome mothers, and young students who had just aged out of formal high school. A large source of learners are jails, several Divisions have had longstanding programs with the local jails, students always complete the course and their passing rates are relatively high. ALS learners are usually motivated by the desire to obtain a degree, some of them are after the degree specifically because they need it for the next step in their work, others have more vague reasons, while the most motivated ones are those who had not completed schooling because of economic reasons but are otherwise high performers academically. Given how unstructured the program tends to be and that the learners have family and work responsibilities, the completion rates are low, and the passing rates for exams are also low.

To some degree the low passing rates are expected given the challenges that learners face. ALS serves as well as a catchment program for PWDs who cannot attend regular schools (Clarke & May, 2014), communities with high levels of conflict or have been displaced by natural disasters, students with learning disabilities, and adults who are employed full-time. A review of the current literature suggests however, that at least some portion of this low performance can be reversed through improved support systems and funding. Arzadon & Nato (2015) interviewed ALS facilitators in depressed and underserved areas, finding that facilitators regularly subsidize costs related to program delivery, and feel they have limited support in dealing with challenging situations. Namely, that classes are comprised of a varied mix of students in different levels, requiring highly technical skills to teach, students are working and find it difficult to attend classes, and there are students who require basic literacy lessons. There are thousands of ALS learning centers across the country; the varied contexts of each learning environment need to be accounted for in addressing limitations (Igarashi *et al.* 2018).

Learners are very motivated when they begin the ALS program; in our fieldwork ALS students always mention that the barrier of cost, which they have in formal schooling, is no longer an issue with ALS since the teacher provides them everything, down to the paper and the pencils. There is barely transportation cost to attend because the teachers travel to where students are located, and they adjust the class schedules to accommodate availability of students. If students are unable to complete the cycle, they can join the next offering.

Recent evaluations of ALS reveal not only operational concerns, which are currently well understood and being addressed, but issues concerning quality. See, e.g. Igarashi *et al.* (2018). The ALS curriculum, for starters, has not been adjusted to adhere to K-12. The overall national level rates of passing equivalence exams are generally low, although the quality is highly uneven, there are areas and situations where large sets of students take the test and have passing rates exceeding 80%. Formal evaluations by Igarashi *et al.* (2018) suggest that the returns on ALS participation are larger among the younger participants, those with more years of formal schooling, and those to took and passed the equivalency exam.

Of concern is that the exams apparently have not been regularly conducted, so there are learners who have completed the program but are still without the equivalency because the exams were delayed. These delays can make it less likely that takers will succeed, since too much time has passed since they were in a class. Regular equivalency exams are a must if the ALS program aims to give their students a fair chance to obtain a degree.

Speaking with learners, division officials, and teachers all lead to overwhelming support and positive words for the program. However, it remains important to keep careful track of the quality of the education ALS provides. A real evaluation of quality of instruction would allow for comparison between graduates of formal schooling and of ALS, or even at some equivalent point of assessment (for example, the NAT). These evaluations do not have to be across all the learners but can be a random sample of ALS graduates that passed the exam alongside a random sample of recent high school graduates. Such periodic reviews can be cost-effective and would provide much-needed guidance regarding the direction and scale of these types of interventions.

Safeguarding quality will allow for higher levels of acceptance from post-secondary schools, where ALS passers are not discriminated against in college applications or work applications. ALS carries the burden of being "not really" a full high school degree, since it is so much less structured than formal schooling and the students are adults. Still, there are many success stories, and it is important for outside observers to remember that for many students that drop out of school, the main reason is poverty and factors related to poverty, not an inability comprehend the lessons. That means many intelligent and highly capable disciplined high school students may end up in ALS if they are forced to leave school to work, thus, the potential student pool for ALS includes high performers with strong motivation.

Clearly ALS plays an important role in catching the population that were unable to complete the basic education cycle, and there are many of them. That said, the relative role of the ALS program in relation to the goal of eliminating OOSC must be clearly articulated. One of the division heads we interviewed had a strong grasp of this. For him, as a DepEd veteran who has seen many schools and multiple divisions, ultimately the goal of the system is to have the ALS run out of qualified learners completely. The primary goal should always remain keeping all school-aged children in school until they complete the K-12 program, only those who do not complete even after all interventions in formal school have been exhausted are targets of ALS. For as long as ALS finds learners that are qualified to be under their program, it means that the shortcomings in the formal system and the conditions of poverty and related issues which push students out of school prematurely, persist. There is a danger that in some areas ALS is being used as a catchall, and even school-aged children in secondary age are moved into ALS. A clear articulation of the real focus and equivalence of ALS is needed, should it be geared toward skills and employability? Or is it expected the provide basic education equivalent to the formal schooling, where the focus is on fundamentals like critical thinking, logic, and science and mathematics? If it is the former, then it would affect the willingness of higher education institutions to accept ALS passers into college programs.

In addition to clarifying the role of ALS against support to formal school mechanisms to reduce OOSC, further articulation is needed as to the targets of the ALS program at the national and sub-national levels. So long as learners qualified for ALS are only those who are not schoolaged, technically they are not OOSC, as they are not children. Parallel efforts to bring schoolaged children back to the formal school system should not compete with ALS, the latter should not give younger students a reason to leave formal school for ALS because of its lower

expenses, flexible hours, and overall more enjoyable (perceived) school experience. To this end, DepEd should clearly specify the target population and balance that constantly with dropout rates at the national and subnational level. What is the denominator for the calculation of whether ALS is making headway? Is it all adults aged 19 to 75 without a high school degree? Is this a reasonable target given the many competing priorities of the Department?

ALS coordinators and teachers enroll as many learners as they can handle in any given year, they have no clear sense of whether they are doing better than last year, what percentage of the total in their area they have caught and what percentage they are supposed to target. Given these, they also have no empirical basis for asking for additional teachers or funding. Mapping is conducted every year to identify qualified potential students, but these do not seem to be used to check their progress in terms of eliminating the adult population without a high school degree. ALS in its implementation had become a program that is run like an entrepreneurial business (not to make profit, but to raise money for the program to run) where teachers go to LGUs, NGOs, and community benefactors to gather funds. This is not necessarily a bad thing, it may have secondary benefits in terms of community cohesion and local government buy-in for DepEd programs, but this means that the poorest communities in the poorest local governments where higher concentrations of non-graduates would be are less likely to have enough resources to run a full high-quality program.

As support for ALS expands in the current DepEd administration, full and regular monitoring and evaluation mechanisms must be in place to ensure efficient allocation of resources. Year-on-year expansion of ALS should only be temporary; the longer-term goal should be a complete elimination of the program because there are no more qualified learners. Such an outcome can only be achieved if school-aged children are kept in formal schooling until graduation.

2. Prevalence of OOSC: National and sub-national picture

In estimating the prevalence of school-aged children not attending school we use the APIS, for children aged 5-15 years old when comparing with older years. Primary school age is 5-11 and secondary is 12-15. In later sections of this paper these ages are extended to 17 years old to accommodate the new Senior High School (SHS) ages. Based on APIS data the prevalence of OOSC² is at 5.3% in 2017, showing no improvement from 2014 when it was estimated at 5.2%, although still much lower than the 11.7% figure in 2008 (David and Albert, 2015).

Table 1 lists recent OSSC rates estimated by the UNESCO³ Institute of Statistics (UIS) in selected member states of the Association of South East Asian Nations (ASEAN). Comparing the country's OSSC rates to those of other ASEAN member states; at the primary level we have much higher rates than Thailand and Vietnam according to the UNESCO-UIS data, lower

² Counts of out-of-school children (OOSC) include not only those children who are not in school but also primary-aged children and older who are either in preprimary or non-formal education (as per global OOSC definition espoused by UNICEF).

³ United Nations Educational, Scientific and Cultural Organization (UNESCO)

only than Cambodia, Indonesia, and Laos⁴. At the lower secondary level, the OOSC rate is very low compared to all neighbors, and at par with Vietnam. While at the upper secondary level in 2015 the OOSC rate is still around 16%, lower than all other countries except for Indonesia and Brunei.

Table 1. ASEAN OOSC rates in different levels of schooling, various years

ASEAN		P	rimar	y		Lower Secondary Upp					Upper	er Secondary			
Member State	Year	National	Year	Female	Male	Year	National	Year	Female	Male	Year	National	Year	Female	Male
Brunei															
Darussalam	2017	3.59	2017	3.78	3.40	2014	2.37	2011	1.08	0.19	2017	18.35	2017	16.38	20.19
Cambodia	2017	9.44	2017	9.65	9.23	2015	13.29	2015	14.12	12.48	2014	61.25	2014	63.44	59.11
Indonesia	2017	7.27	2017	9.90	4.75	2014	11.79	2014	9.94	13.52	2017	14.94	2017	12.78	16.98
Lao PDR	2017	6.66	2017	7.18	6.16	2017	21.73	2017	22.27	12.66	2017	38.11	2017	41.08	35.23
Malaysia	2017	1.40	2017	1.23	1.55	2017	12.05	2017	10.92	21.21	2017	36.63	2017	32.02	40.99
Myanmar	2017	2.29	2016	7.77	6.57	2017	24.03	2017	22.97	13.13	2017	46.40	2017	42.55	50.21
Philippines	2016	4.55	2016	4.08	4.99	2016	7.32	2016	4.99	9.48	2015	20.23	2015	16.71	23.54
Thailand	2009	1.98	2013	0.98	1.37	2017	11.06	2017	10.91	11.21	2015	20.93	2015	21.00	20.85
Viet Nam	2014	1.99	2014	2.28	1.73	2014	7.24	2014	7.29	7.18	2014	26.74	2014	23.98	29.52

Source: http://data.uis.unesco.org/

Dropout rates are an alternative metric and capture the reports from schools of children whose education stops at some point prior to completion of the full cycle (**Table 2**). UNESCO-UIS data for 2014 indicate that at the primary level the Philippines has a 12.5% dropout rate, high compared to Thailand, Indonesia, and Vietnam. In the lower-secondary level it is 11.5%, higher than all the same countries mentioned.

Table 2. ASEAN Dropout rates* in different levels of schooling, various years

ASEAN member		Prin	nary		Lower Secondary					
state	Year	Total	Female	Male	Year	Total	Female	Male		
Brunei Darussalam	2016	6.8	7.7	6.0	2016	1.6	0.6	2.5		
Cambodia	2016	23.8	21.2	26.1	2016	31.7	29.8	33.8		
Indonesia	2016	2.4	1.0	3.7	2016	6.5	3.9	8.9		
Lao People's										
Democratic Republic	2016	18.9	17.4	20.3	2016	25.3	25.1	25.5		
Malaysia	2016	3.6	2.7	4.5	2016	5.8	4.2	7.3		
Myanmar	2016	24.6	25.9	23.5	2016	16.1	12.7	19.6		
Philippines	2015	12.5	9.4	15.2	2015	11.5	8.3	14.5		
Thailand	2016	7.8	7.9	7.7	2016	10.1	6.9	13.2		
Viet Nam	2014	4.0	1.9	6.0	2015	9.2	9.3	9.1		

Source: http://data.uis.unesco.org/

Note: *= Cumulative drop-out rate to the last grade

We must note that for both levels the reported figures in APIS 2016 are lower, and especially against DepEd data on school leaver rates, the 2015-2016 academic year figures were only 2.7% for primary level and 55 for secondary level. The explanations for these discrepancies

⁴ UIS data are different from the national data from APIS and DepEd. Statistics reported in the ASEAN comparative tables are for purposes of cross-country comparisons. All in-country trends use internally consistent data that are comparable across time.

may be the pressure in the education system to produce zero dropout metrics at the end of each school year, along with the dropouts that happen in transition between academic years which would not be reflected in the measures. These possibilities are explained and explored in further detail in later sections on the pressures on teachers.

Among 5-year-old children, those that are supposed to be in Kindergarten, 189 thousand were not attending school in 2017, much lower than 776 thousand in 2008, but higher than the 177 thousand in 2014. The number of children 6 to 11 years old or primary-aged not attending school stands at 571 thousand, representing an increase from 2014 when it was 420 thousand, down drastically from 1.27 million in 2008. At the lower secondary age (12 to 15 years old), the total number of OOSC declined in 2017 at 475 thousand, from 980 thousand in 2008 and 660 thousand in 2014. This represents an OOSC rate of 5.6% for the secondary level, the lowest it has been since 2008 when it was 10.5% and 2014 when it was 6.2%. A much higher percentage of those in the upper secondary age range of 16 to 17 years old, 17.4% corresponding to 768 thousand children, were not attending school.

Across all levels the total OOSC rate is not evenly distributed by region (Figure 1). ARMM has the highest level of OOSC prevalence throughout the country, with slightly over 12% of children of school age not attending school. Regions 12, CALABARZON, and 4B follow it with prevalence rates over 6%. The lowest OOSC rates at or below 4% are in NCR, Central Luzon, Bicol, and CAR. A key intervention strategy that should be considered is to focus energies on dramatically reducing dropout rates in the high-OOSC areas which likely have acute economic and access constraints owing to the generally underdeveloped nature of the provinces within those regions. For example, it is likely that physical access constraints in the island provinces of MIMMAROPA remain a challenge. Lack of resources and high poverty rates in ARMM and SOCCKSARGEN require a holistic approach to guiding children through school.

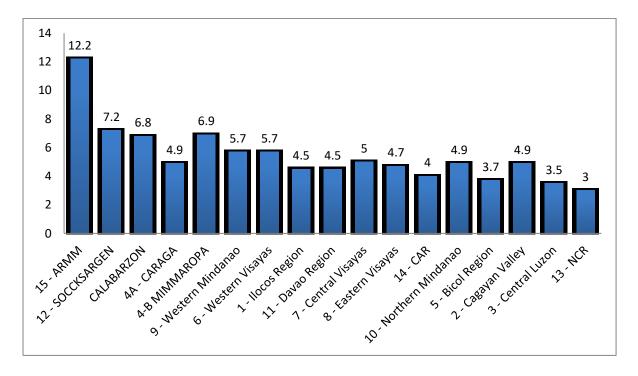


Figure 1. OOSC rate* by region, 2017

Note: Authors' calculations on microdata of APIS 2017, PSA * = number of OOSC aged 5 to 15 / number of children aged 5 to 15

Overaged children. Of the estimated 22.6 million children aged 5 to 15 attending school in 2017, 366 thousand were 6 to 15-year-old children still in pre-primary level, all considered OOSC (as per UNESCO definition used in the first report). Further, 516 thousand primaryaged children and 1.2 million (lower) secondary-aged are over-age for their grades by at least 2 years. This is a considerable reduction from the levels of 5.3 million over-aged 7 to 15-year-old children (3.2 million primary aged, and 2.1 million secondary aged children) in 2008. Children that are over-aged for their grade level are at a high risk of eventually dropping out of school. Usually they are over-aged because they had already stopped attending at some point then came back, or they did not pass the grade level and were held back from promotion. When children are older than their cohorts, they lose interest and motivation because they are embarrassed, are at risk of being bullied and of developing attitude issues as they progress to the higher grades.

2.1. Boys remain disadvantaged in school attendance

School attendance is still largely associated with economic status of the family (**Figure 2**), but economic issues interplay with gender issues. While three fifths (58.7%) of the 1.2 million out of school children aged 5 to 15 in 2017 belong to families in the bottom 25 percent of the per capita income distribution, two-thirds (65.0%) of the total OOSC aged 5 to 15 in 2017 are boys (and an even higher proportion of OOSC can be found among those aged 5 to 17).

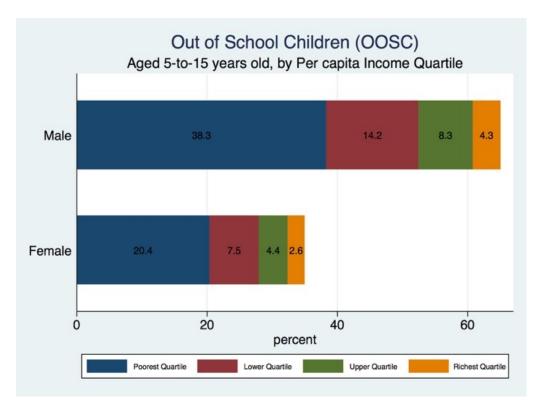


Figure 2. Distribution of Out of School Children by Sex and by Per Capita Income Quartile, 2017.

Note: Authors' calculations on microdata of APIS 2017, PSA

Among the poorest families, boys have a higher likelihood than girls to be out of school. At least some portion of this may be caused by the need to augment the family income. Since boys can work for income earlier in their lives, mostly as informally employed laborers, they are pulled out of school at younger ages than girls when the family is poor. This disparity between boys and girls, in favor of girls, in school participation at all levels of income and all regions of the country has persisted since 2008.

The overall OOSC rates are higher when we include the 16-17-year-old children, going up to 8.3% nationally compared to the 5.3% when we stop at 15 years old (**Table 3**). In each version of the OOSC age range it is readily apparent that boys have lower likelihood of attending school compared to girls, except for Kindergarten.

Table 3. OOSC Rates by age group, by sex 2017

OOSC Rate (2017)	Boys	Girls	Both
			Sexes
5 years old	9.1	8.9	9.0
6-11 years old	5.4	3.4	4.5
12-15 years old	8.0	3.1	5.6
16-17 years old	22.3	11.6	17.4
Philippines (5-17 years old)	10.7	5.7	8.3
Philippines (5-15 years old only)*	6.7	3.8	5.3

Note: Authors' calculations on microdata of APIS 2017, PSA

Many 5-year-old children are still not attending Kindergarten (9%), although some of this may be the result of confusion of exact starting age as it can be confusing for parents in terms of which exact month of birth is the cutoff for starting school. The older the children get the gender gap widens significantly. In primary age, OOSC rates among girls is 3.4% while for boys it is 5.4%. In lower secondary level it is over double the rate, 3.1% for girls and 8% for boys. Then in upper secondary it is double, a very high 22.3% among boys and 11.6% among girls. The senior high school level may still need time to stabilize since this is the beginning years of K-12 implementation. There may still be adolescents in this age range who were grandfathered into the old system, especially in areas where SHS is not available.

Regional differences in the gender gap are apparent as well (Figure 3). While the Autonomous Region of Muslim Mindanao (ARMM) has the highest OOSC rate for both boys (13.8%) and girls (10.6%), the OOSC rates of boys in Soccsargen and Caraga is an alarming four times greater than those for girls, with the disparity in OOSC rates between the sexes at 6.1 percentage points.

^{*=} attention to 5-15 years old is provided for comparability with previous PIDS reports on OOSC.

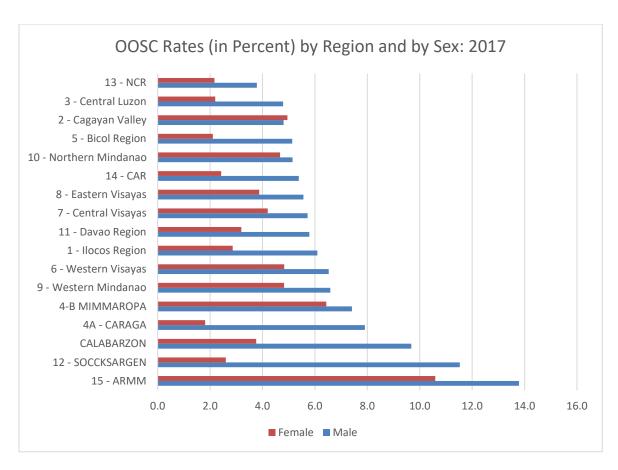


Figure 3. Distribution of OOSC by Region and by Sex, 2017.

Note: Authors' calculations on microdata of APIS 2017, PSA

The disparity against boys is not only as far as in school participation but goes into performance metrics across different grades in public schools, where females continue to score better on the national achievement tests than boys in both primary and secondary levels and in every subject tested (**Table 4**).

Table 4. National Achievement Test Mean Percent Score by subject, residence and sex (SY 2016-2017)

Residence		Scie	ence		HEK	ASI/Aral	ing Panlipu	nan	Overall			
	Grade 6*		Grade 10**		Grade 6*		Grade 10*		Grade 6*		Grade 10*	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Rural	31	29	37	34	43	35	51	43	41	36	46	41
Urban	34	33	37	35	47	39	52	45	46	40	47	42
Total	33	30	37	34	44	36	51	44	43	37	46	41
	Filipino				Math				English			
Rural	56	48	54	48	35	37	39	36	42	34	48	42
Urban	59	52	55	50	39	37	38	36	49	42	50	43
Total	57	49	54	49	37	34	39	36	44	37	49	42

Note: Authors' calculations from data provided by DepEd

In the Grade 6 test, females obtained a mean percentage score (MPS) of 43 while males scored an average of 37. In Grade 10 it is 46 for females and 41 for males. The score differences are

^{*}Missing values = 31.48%; ** Missing values = 20.23%

most acute in Filipino and HEKASI but are also present in the other subjects of Math, Science, and English. Across test subjects and (urban/rural) residence of students, the patterns show further that the disadvantage of boys is present across all subcategories.

Clearly the gender disparity problem in the Philippine basic education system is in urgent need of attention. Since most students that are at risk of dropping out or failing a grade are male, interventions need to pay specific attention to keeping boys in schools. Currently, the government's conditional cash transfer has not differentiated education grants by sex, despite the repeated suggestions in previous reports to account for differential opportunity costs of keeping boys and girls in schools. These disparities between the sexes get even wider in higher education institutions.

3. Beyond prevalence: Data from national surveys

Data from the DepEd provide broad distributions of school leavers, but these administrative data are unable to shed light on the reasons for why children are not in school. The APIS routinely asks survey respondents for reasons why children in their household are not in school. When a household respondent reports that a there is a school-aged child not attending school, they are asked why and the reasons given are categorized into pre-set categories that include lack of personal interest, employment, early pregnancy, and others. Results of this question allow us to compare changes in reasons for failure to complete schooling over time, and across both sexes.

Among primary-aged OOSC the most commonly selected reason for leaving school is "lack of personal interest," followed closely by illness and disability, then by the high cost of education (**Table 5**). Note that since the OOSC rate for primary aged children is already quite low, the remaining OOSC are thus, very much the "last mile" children who may have acute difficulties and challenges keeping them away from school. Of note in the comparisons between the sexes that girls are more likely to be kept home because they are perceived as being too young for school, and are, for some unexplainable reason less likely to report having no nearby schools than boys.

Table 5. Reasons Reported Why Primary aged- and Secondary –aged Children Are Not in School: 2008, 2014, and 2017.

Reasons for Not				Primai	y Aged C	hildren				
Attending School		2008			2014			2017		
	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both	
			Sexes			Sexes			Sexes	
Lack of personal interest	35.2	27.0	31.7	38.2	30.5	36.0	31.4	27.8	30.2	
High cost of education	11.0	12.2	11.5	15.3	11.2	14.1	13.7	6.4	11.4	
Too young to go to school	24.6	35.3	29.2	9.5	14.6	11.0	6.9	18.3	10.5	
Illness/Disability	10.1	8.7	9.5	33.7	37.1	34.7	27.0	32.5	28.8	
Lack of nearby schools	7.4	7.5	7.5	2.1	2.1	2.1	14.0	0.0	9.6	
Employment	0.1	0.2	0.1				0.0	2.6	0.8	
Other reasons (incl. school records, marriage, housekeeping)	11.6	9.2	10.5	1.2	4.5	2.1	1.4	1.2	1.3	

Reasons for Not				Seconda	ry Aged-(Children				
Attending School		2008			2014			2017		
	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both	
			Sexes			Sexes			Sexes	
Lack of personal interest	54.7	33.9	47.2	51.2	29	44.1	60.6	41.8	53.2	
High cost of education	21.9	30.3	24.9	25.2	38.3	29.4	22.4	18.9	21.0	
Too young to go to school										
Illness/Disability	5	8.2	6.1	10.4	16.7	12.4	7.8	9.8	8.6	
Lack of nearby schools	3.3	5.6	4.1	0.6	2.7	1.3	4.6	4.7	4.6	
Employment	9.2	7.8	8.7	6	1.9	4.7	3.4	12.5	7.0	
Other reasons (incl. school records, marriage, housekeeping)	5.9	14.2	8.9	6.6	11.3	8.1	1.2	12.4	5.6	

Note: Authors' calculations on microdata of APIS 2008, APIS 2014, APIS 2016, PSA

At the secondary level, we would not characterize the OOSC as last mile groups, since the prevalence rates and dropout rates remain high. Among those aged 12-15 years old and not in school, over half (53%) report that the reason is lack of personal interest, followed by 21% saying it is cost. All other reasons have prevalence of less than 9%. Cost of schooling and illness have declined significantly since the last measure. These top two reasons have been unchanged since 2008. The proportion identifying lack of interest as a reason is higher in 2016 than in 2014 by almost 10 percentage points, and it has a gender dimension with a bigger share of boys more likely to lack interest in schooling. The "lack of interest" reason deserves further unpacking given the high rate of occurrence and the vague nature of the response option in the survey. A recent World Bank report on poverty (2018) in the Philippines speculates that parents may calculate that the perceived gains of further education are no longer worth the opportunity cost. In this paper we have qualitative evidence that refutes such a speculation and paints a much more complex picture of what explains this particular survey result.

Econometric analysis (using a logistic regression) of nonparticipation suggests that assuming all other explanatory variables are constant (i.e., *ceteris paribus*).

- Children who come from families with more per capita expenditure (i.e. wealthier) are less likely to be OOSC. For primary school-age children, every one-percent change in per capita expenditure is associated with a 0.42 per cent decrease in the odds for not attending school. The association is more pronounced for secondary school-age children, for whom the decrease in odds for not attending school is 0.74 per cent.
- Compared to six-year-old children, children aged 7 to 11 years are less likely to be out of school; Children in the 13-to 15-year-old age range are also more likely to be OOSC than 12-year old children.
- Every unit increase in pupil-to-teacher ratio is associated with an increase in the odds of nonattendance in school by 6 per cent in primary school-age children and 3 per cent among lower secondary school-age children

- Boys are at a higher risk of being out of school. Primary school-age girls are 1.9 times more likely to be in school than their boy counterparts; lower secondary school-age girls are 2.2 times more likely to attend school than boys in their age range.
- Compared to children with mothers who have attained at most primary level of education, children with mothers who have attained more education tend to be less prone to being OOSC.
- For every extra sibling in a family, each child has 1.2 times more risk of being out of school (whether in primary or lower secondary school).
- Children from families with older household heads are more at risk of being OOSC.
- Primary school-age children who are part of families where the household head is male tend to be less at risk of being OOSC, while for lower secondary school-age children, the risk is higher.
- The older the household head, the less likely that a child will not be in school.

A similar logistic regression is run this time predicting the "lack of personal interest" category as the identified reason for being out of school. Results suggest that for those of secondary school age, holding other variables in the model constant, lack of interest is more likely selected when mothers have less education, when the household head is younger, and when the child is male as opposed to female.

These results are very similar to those presented in the Out of School Children Report of DepED, PIDS and UNICEF (David & Albert, 2012) indicating that while the overall numbers have declined, not much else has changed in terms of the basic predictors of OOSC status at least as far as the surveys can reveal.

4. Beyond prevalence: Experiences of educators, students, and parents

The significant reduction in dropout rate and OOSC prevalence for some age levels has meant that the remaining barriers to completion of basic education are likely very difficult to address. Through in-depth interviews with teachers, principals, Alternative Learning Systems (ALS) coordinators, division heads, parents, and children who are at risk of dropping out, we attempt to enumerate some of the most common reasons for children not being able to complete schooling. These are grouped into demand and supply side barriers, highlighting the demand-side more and encompassing the intricately connected economic and socio-cultural factors which were most often mentioned in the interviews.

In the earlier OOSC report, there were a number of problems identified which have been addressed, mostly as a result of the full rollout of K-12. Mismatched perceptions of children's school readiness for Grade 1 is no longer mentioned in the current interviews, the ages for Kindergarten entry are clear to parents and teachers and the delayed entry of children is no longer prevalent as evident in the low remaining proportion of 5-year old children not in school. Parental concerns about the cost of schooling seems less prominent in the current interviews,

so some of these may have gone down as strict no-collection policies have since been instituted. In 2012 the absence of an official birth certificate would keep students away from school, this has also been practically eliminated as a concern.

An update of literature published and reports released from 2014 onwards shows four broad areas of interventions currently ongoing that have impacts on school leaving and OOSC in the Philippines. First is a focus on the issue of physical access to schools and how difficulties in getting to school can present significant barriers to continued attendance. Second is the impact of the Pantawid Panilya Pilipino Program (4Ps), government's conditional cash transfers, on school attendance. Within numerous studies on the impacts of 4Ps there appears robust evidence that children whose families are part of the 4Ps have improved school attendance (Orbeta and Paqueo 2016). Our study mostly confirms this⁵ and does not add much to what has already been discussed in other papers, although there are areas of potential improvement in monitoring and total support. Third are the impacts of health and nutrition-based interventions, such as school feeding. Fourth are disasters, in the form of natural hazards and local armed conflicts, both of which can displace school children for short or long periods of time. On this our current study adds a new dimension of displacement that has important impacts on schools, resettlement of urban poor families into new neighborhoods. Fifth is the most commonly studied one, child labor. And finally, the DepEd's flagship program to bring people who have dropped out, back into an alternative schooling approach, the well-established ALS. It is through ALS that the system can reach populations that have special difficulties (PWDs), working students, and individuals who stopped attending formal school several years prior. The existing studies are discussed alongside results of the qualitative interviews. Before explaining the most important causes of dropping out of formal schooling and OOSC status, we first describe the main programs of the DepEd specifically initiated to reduce the number of OOSC in the country.

4.1. Socio-cultural demand side barriers to basic education completion

The APIS results point to specific reasons parents report, for why a child in their family stopped going to school. Aside from the obvious financial reasons (employment), the other prominent categories mentioned are "lack of interest," "others including "early pregnancy and marriage." In the interviews we specifically asked participants to elaborate on these categories, in the process it became clearer that the myriad factors which make up each of these are interconnected and can usually be traced back to poverty or the need to generate more income.

Multifactor regressions indicate that one of the significant predictors of being OOSC is having a household head with a low level of education, which in turn, likely means that the family is poor. Based on differentiated interviews with elementary-level and high school-level teachers

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⁵ The 4Ps is generally well-received by parents, teachers and students, though interviews suggest that it is found to be more effective in keeping students in primary than in high school, as the costs are higher in the secondary level. Parents of 4Ps beneficiaries have also become very involved in the schooling of their children as a result of the program, as they are afraid that they will lose the benefit. However, there is a clear need to evaluate if the grants provided are enough, especially as no changes have been made on the amounts given in recent years, except that the 4Ps provides 500 pesos monthly tor high school child-beneficiaries (while preprimary and primary aged children are each given 300 pesos, but for a maximum of three beneficiaries per family). Except for this change, these amount given for education grants have not been changed since program inception, although this year, 4Ps families were an extra 2400 for the entire year to cushion the effects of government's tax reform.

and principals, it appears that the risk factors evolve from one level to the next (**Table 6**). At the primary level, the common problems are extreme poverty, the absence of a parent, broken families, inability to read, and domestic abuse or trauma. Once children reach junior high, the risk factors become early marriage or pregnancy, peers or "barkada," computer games, disciplinary problems, and work. Each of these factors is described below, and at the end a description is provided of how these are linked and the most prominent and likely fundamental risk factors. The manner in which all factors are connected relates to instability in the home life, usually emanating from either acute poverty conditions or absence of parental guidance.

Table 6. Common causes of risk for dropping out and systemic solutions for risk management

	Kinder	Grades 1-6	Grades 7-9	Grades 10-11	Adults
Common	Confusion	-Non-readers	-Poor	-Lack of	-Working
causes	about start	(leads to anxiety)	academic	interest	-Caring for
	date	-Abuse and	performance	because of	dependents
		trauma in the	-Barkada	poor	(elderly
		home	-Boys start	academic	and/or
		-Undiagnosed	working	performance	children)
		learning	-Girls care for	-Working	
		disabilities	younger	-Early	
		-Lack of parental	siblings	pregnancy	
		guidance	-Very early	-Poor attitude	
		-Hunger and cost	pregnancy	toward	
		of transportation	-Early	authority	
		-Physical distance	marriage	figures and	
		from school	-Disciplinary	schooling	
			problems		
			-Domestic		
			problems		
			(broken		
			families)		
			-Poor attitude		
			toward		
			authority		
			figures and		
			schooling		
System	Mapping	Remediation	Open HS	Open HS	ALS
solutions	and	Home visitations	Remediation	ADM	
	information	Guidance	ADM		
	campaign	counseling	Home		
		School feeding	visitations		
			Guidance		
			counseling		

Family instability. Teachers and principals in elementary schools identify, right after extreme poverty, family problems as the most common reason for students' absenteeism and dropping out. These come in the form of separation of the parents, the absence of one or both parents because of work out of town or country, abandonment, domestic abuse, and in rare cases even incest and sexual abuse. Two broader categories for these are (1) unstable or unavailable parental care, and (2) abuse and trauma. The former is very common, leading to absence of

support for learning at the home, and manifests in children through poor performance in school, emotional withdrawal and thus lack of attention while in school, and inability to focus.

Take a hypothetical of a child in Grade 2 whose parents separate, she would be affected emotionally by the absence of one parent. If the father leaves, it usually means that the mother is left without an income source and children have to work, the mother would then work and lose the time to guide children through school as a solo parent in a poor family. Often this would mean putting the eldest child in the position of having to miss school to take care of their younger siblings, eventually being placed at risk of dropping out because of repeated absences. In some cases, separation of parents means that the siblings get sent elsewhere for care, because the mother cannot afford to keep all of them, they get sent to aunts or grandparents, where they do not receive the same level of attention as a parent. This scenario plays out very often, and ordinarily it would help to have trained guidance counselors (of which there usually are none in a typical school) to help a child cope with such drastic changes in the home by finding ways to make school a part of or a source of their stability.

Sometimes children have no close guidance because one or both parents are away long-term for work, either as OFWs or as in-country workers who have moved to different provinces or cities away from their children. In these situations, teachers find that students are left under the care of grandparents who may be too old to keep up with the demands of caring for young children, or aunts and uncles, or the eldest sibling who barely qualifies as an adult. Teachers deal with guardians when interventions are needed, and they say that very often the absence of parents means that the children do not have the social and emotional support needed for their education (i.e. help with homework, making sure they attend school, keeping watch over their grades). The lack of oversight that normally would come from parents have implications on the children. Particularly with older children, pre-teens and teens, they are free to make their own decisions, skip classes, go out drinking, or spend their money and class days in computer shops.

The second major source of instability is domestic abuse or trauma. It is not mentioned very often but at the same time it is noticeable enough that it is raised by teachers in some areas, particularly urban ones or Mindanao where there are "cultural practices" that may be harmful to children. Domestic abuse can range from sexual assault to physical and verbal abuse. The children attend school but are inattentive and poor performers. When they are older, they develop attitudinal issues or extreme anxieties. Teachers will find this out when they speak with the child, or with the child's friends in school. They refer these cases to an assigned "guidance counselor coordinator6" who is often a teacher with additional duties and very little, if any, training to deal with cases of trauma. The vast majority of schools have no full-time guidance counselors so teachers will stand in that role, with some, albeit little, training.

Most domestic abuse cases are within a family, but in one area in Mindanao, the teachers say that there are beliefs and cultural practices in some communities that are harmful to children. These are early arranged marriages (from 13-16 years old) which then lead to forced sex in the marriage and early pregnancy. It is common enough that the dropoff of students between the

mostly work related to career awareness for students.

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⁶ Teachers assigned as guidance counselor coordinators are not licensed or trained in guidance counseling. The DepEd's hiring policies for guidance counselor positions are extremely stringent, making it difficult to fill plantilla positions, and the positions have low salary grades. In the absence of such personnel in the school, one of the teachers is given a special role to do guidance counseling. In many cases in these roles they do

Grade 6 to Grade 7 transition is steeper compared to other years, as this is around the age that they are married.

Barkada and computer games. Straight from the testimonies of those that dropped out of school, especially boys in high school, the reason why they start accumulating absences is their group of friends and computer games. The "barkada" is a unit, a group of peers who spend time together and do things together, peer influence can be positive, in the cases of those who eventually left school this is negative. As a group, they would leave the school premises and spend the day in computer shops playing games, or they would hang around outside without any real activity (tambay), or they would go drinking. In many cases the parents or guardians think that they are in school and would just learn about the absences from teachers when home visitations are conducted in response to the absenteeism.

Computer shops provide an inexpensive means to access the Internet, social media, and online gaming. These are located often within walking distance of a school, sometimes right across it. Some schools have attempted to work with the local government units (LGUs) to regulate the entry of school-aged children during class hours, or prohibit the operation of computer shops within a kilometer of a school, but this has proven difficult to implement, particularly in a few areas visited for this study. Also problematic are mobile games, especially in urban areas where even public school students have smartphones and unlimited data plans. They stay up all night playing and show up to class the next day groggy from lack of sleep. Eventually the absenteeism will take its toll and they would start failing classes, lower grades then lead to lower motivation to complete schooling, and eventually they will drop out or fail the level entirely. We hear these stories from teachers as well as students currently enrolled in ALS, they would openly admit that computer games and *barkada* are the reasons they ended up leaving school.

Ultimately the close dependence on peer groups, and the ability to make unilateral decisions to habitually leave school to spend the day at a computer shop are symptoms of a more fundamental cause, the shortage of adult guidance. In a particularly compelling interview, a school principal expressed it with much clarity in a very simple way. For these children what is missing is "love and attention." They don't get it from the home, so they look for it among peers, they become attached to and dependent on the attention of friends, and oftentimes this leads to bad influences. That said, in the same way that peer influence can lead to poor outcomes, it is also the case that peer influence can support students in a positive way. In at least two schools included in this study, the teachers describe a "peer support" system where low performing students get mentored by high performing ones, and they attest that this can lead to higher grades and increased motivation.

Extreme poverty. The vast majority of children at risk of dropping out come from families that are very poor. Reasons for initial signs of chronic absenteeism include having no money for the allowance some days (20-50 pesos), no transportation, no food, they have to stay home to care for their younger children, and transience of a family because they move in and out of communities for employment reasons. One student from a rural area in Aklan tells us that since their parents only have enough money to give one child an allowance everyday, she and her sibling take turns going to school. Several students in the ALS program recount that the reason they initially would leave their education is to move because their parents don't have work or are looking for work (to or out of the city). Often a family would move multiple times during a child's years in basic education, which means they get pulled out during the middle of the

schoolyear, which leads to delays overall or poor performance because they would need to catch up when transferred. This makes them older than their cohorts, which then puts them at risk of bullying, embarrassment, and generally losing interest in schooling.

The best example of this phenomenon can be seen in some schools of Paranaque, a densely populated area where Paranaque borders Pasay, where the residents are extremely poor and often are living in slum conditions. Most families make a living vending goods on the street. The area is a shopping destination every Wednesday and during holiday season. Vendors are often migrants from Mindanao. In the schools, students transfer in and out in the middle of the schoolyear because the parents arrive from Mindanao during times of hardship to look for work, then when they lose income opportunities, would move back. Children are sometimes sent back to the province without their parents; since it is more expensive to go to school in the city or there are relatives in the province who can better take care of them. Primary-aged children start skipping days of school in the early grades; they help their parents sell on the streets. The principal says that every Wednesday (vending day) their student body is noticeably smaller; teachers say up to 40% of students would be absent on that day. This gets worse as Christmas shopping season begins in September and October, then the street vending is everyday, and children will begin missing more days until they end up eventually dropping out. If they are not out in the street selling, children are left in charge at home to care for their younger siblings, either way they are not in school.

This is an example in a dense urban community, but similar effects can be seen in farming communities. Older children work during planting and harvest seasons, so they disappear for about 1-2 months at a time. Some are able to come back and catch up, but most are not, and will eventually drop out at some point in high school.

Children from poor families have highly unstable home conditions and are vulnerable to multiple sources of risk emanating from the lack of financial resources that may redound to hunger and developmental delays, as well as from the absence of close adult or parental guidance that all children need in order to thrive. The trajectory of these children in the education system is familiar to teachers: they would periodically disappear from school and individualized intervention would be needed to bring them back. Home visitations, meetings with parents, feeding, remediation classes, alternative modes of learning, and other similar measures can bring them back especially in the lower grades. However, the older the child is the challenges multiply as they get even less parental controls, greater autonomy in their day-to-day life, become old enough to earn some income, and start developing attitude and behavioral problems. Eventually in high school, they would drop out. These same individuals are currently in some ALS programs, but still have difficulties completing their education.

Family size. In multiple FGDs of students at risk of dropping out (SARDOs) or children who did drop out and are currently in an ALS program, it became clear that family size is a critical risk factor in failing to complete school. Related closely with extreme poverty, having more than 2 children in a family makes it difficult to continue to attend school. This field evidence is supported by the regression results earlier which shows that participation in school is less likely with each additional sibling in the family. Participants who dropped out or are chronically absent report that they have 4, or 5, even 7 siblings. Older siblings skip school to either work or take care of their younger siblings, and younger siblings skip often because they don't have food or allowance or transportation. We met siblings who took turns to attend school because their mother could only afford transportation for one child. Another ALS participant

said that she has 6 siblings and the older children stopped school, so they could support the education of the younger siblings. Parents who have limited income have to make daily decisions and long-term decisions to balance which child receives which resource. Would the goal be to pour all energies to push the completion of one child, while sacrificing the education of the others? Or should it be to try to get all children up to some level of education but all of them will not go far enough to get a high school degree? These are hard choices that are made by parents even if they would not admit to it readily.

Beyond the income pinch, when parents living in poverty conditions have many children they cannot attend to the emotional needs of all very effectively. Mothers who are working and taking care of babies do not have enough attention to give to their eldest who is in Grade 5 and having difficulty passing their exams. Time poverty and attention constraints on parents in large families are real, and in some ways, it is through these channels that schools and teachers can compensate (rather than on income).

Poor academic performance. Parents of SARDOs or OOSC, and sometimes the former students themselves when they are in in ALS, are asked specifically what led to their refusal to go to school (ayaw pumasok, hindi mapilit). For many, the real reason, especially among boys, is that they fail exams and anticipate they will fail the grade. Even teachers point out that it is poor academic performance that depresses the motivation and interest of students, and this trajectory starts in the very early grades, specifically traced back to whether they learn how to read at the right point in primary school.

Reading is taught in Grades 1-3, and ideally basic reading skills are acquired by the second grade. Elementary schools have nonreaders, however, that get promoted through the early grades. In one high school included in this study, teachers said that in some years up to 10% of students get promoted to Grade 7 even as nonreaders (barely any comprehension skills). In some areas strict implementation of "no reading, no promotion" in the early grades are being piloted, but the teachers point out that this will adversely impact their performance reviews and ultimately their qualification into the "PBB" (performance-based bonuses) since zero dropout and 100% promotion rates are included in their metrics.

When nonreaders clear the first three grades, they will spend the later grades struggling and will eventually drop out in high school. They will lose interest in lessons because they can't catch up, how could they possibly learn science and math if they cannot read? Nonreaders are at risk of losing interest in school because they would always be in danger of failing classes; they get embarrassed in class, and bullied by classmates. Teachers do remedial classes for nonreaders, and in more enterprising schools they do a "buddy system" where high performing students are assigned to assist the others. In the early grades it appears these can really work and the students eventually catch up, but when they get to the higher grades in elementary without learning how to read, it becomes more difficult for them to catch up. As they progress to high school the students have basic reading but low levels of comprehension, then their low academic performance is compounded by other risk factors like barkada, vices, and the imperative to work, leading to higher risk of dropping out.

Learning disabilities and other forms of mental illness. Inevitably schools get students with learning disabilities or mental health issues, in these cases support from specialist guidance counselors are needed which most schools do not have.

Early marriage or early pregnancy. This was mentioned in the section on domestic abuse, but there are earlier pregnancies that result from real relationships between high school children and not borne out of abuse. In Grades 7 to 11, when girls drop out one of the most common reasons is early pregnancy. These are products of boyfriend-girlfriend relationships and will lead to early marriage. It has become acceptable for pregnant girls to attend school in first and second trimesters, but they opt to stop once they are clearly showing and months after they give birth. In most cases they do not return to schooling, many ALS students who are already parents recount that this is the reason they left high school. The boys, once the child is born, will have to work and eventually also drop out.

The system of Open HS is an opportunity for the teenage mothers to complete basic education. However, while ensuring opportunities for education completion for teenaged mothers is important, the more effective way and impactful way to address this to equip the children (male and female) with sexuality and reproductive health education so they can avoid a pregnancy altogether, whether as a teenager or as an adult later in life.

Education level of parents. In empirical analyses of survey data and through historical research it is always made clear that the education level of parents is a significant predictor of the educational attainment of the child. The traditional mechanism where interventions are based is income, whereby low education parents have limited and unstable incomes and therefore children will have to work earlier. The 4Ps subsidies in theory would address some of this, if the reason for the link is only income, but there are other reasons as well.

Parents of children who habitually skip school, especially those who are in the higher grades, express their frustration over their inability to force their children to go to school. They say that they do everything, provide money, scold the children for missing school, ask them about their progress, but they cannot seem to force them to attend. In interviews with students at risk of dropping out, and their parents, the parents do not even see the children's report cards. Children say they will not show it to their parents. The inability of some parents to effectively motivate their children to go to school may be because they themselves do not have experience with schooling, and are ill equipped to guide their children through things like school projects or homework. Moreover, as children get older and gain more years of education over their parents, the parents lose the "moral authority" to tell their children to continue schooling since they themselves had to stop. One mother, in her frustration, said that she has tried everything to get her daughter to keep attending school, even to the extent of kneeling to her child, but none of it works.

These tenuous positions of parents who desire school completion for their children but are unable to compel them to continue are difficult to address. Schools and teachers can think of support mechanisms for families with these profiles, they are not isolated cases after all and there must be groups of children in this situation in any given school.

4.2. Supply-side barriers

Teacher workload. The chronically overworked state of public school teachers is well-known, it has been brought to fore in a recent tragic story of a young teacher's suicide which has awakened the system's concern for attaining balance in teacher's lives. Just this year the DepEd

Secretary vowed to reduce the workload for teachers, but the details of how much work and what kind of work will be taken off remains unclear. There are many sources of work for teachers in the public school system; actual teaching is only one form of work when in fact it is increasingly being sidelined by the multitude of other responsibilities and roles they play in the system and in the schools.

Teachers across the sites visited for this study all mentioned it eventually, that they can do much more for the students and give the individual attention and guidance that they know will help children succeed in school, if they had more time to focus on the teaching itself rather than all other responsibilities piled onto them. What is worse is that the work comes not only from the education system but from other agencies as well, which reach out to schools because these are the most efficient way to reach large populations of children. A brief listing here is in order: paperwork and reports related to seminars and trainings they are compelled to attend, additional designations in the school (e.g. guidance, budget, disaster response, health officer), earthquake drills and other Disaster Risk Reduction and Management (DRRM) exercises which each demand their own reports, mass immunizations which also require reports, community mapping, deworming, feeding programs for children, census for the national government, antidrug programs, elections, and many more in any given year. Each public school teacher could have a regular teaching load, plus several additional units or roles related to administration or student support.

This situation is hidden from view of the normal metrics, and in that sense can have insidious effects on the erosion of teaching quality. A teacher time-use study was strongly recommended in the OOSC 2012 report, and until now has hitherto not been conducted. DepED has however requested the Asian Development Bank to conduct this, as well as to conduct a profiling of teachers (teaching load, and the different assignments that they have). Such a study should audit not only the time spent by teachers doing non-teaching related work, but also list all the paperwork demands like reports, the trainings and seminars, and the additional responsibilities created by non-DepEd agencies. Further, how large is the administrative component of a regular teacher's workload, and to what extent should this be offloaded to an administrative staffing corps? Private schools have equivalent administrative staff that are in charge of functions like enrollment, registration, records-keeping, data entry, building management, daily operations, janitorial services and other things that need to happen for a school to run. In public schools there are insufficient, if any, support and administrative staff for the teachers, which means that all that work is being done by the teachers themselves.

Out of utter frustration, teachers say they just want to teach, they want more time to speak with students, to give them guidance and to apply what they learned about differentiated teaching. The positive factor here is that teachers fully realize what is needed and want more time with students; more time to innovate on classroom instruction, and to provide more focused individualized attention. Their main restriction is time. Salaries are not mentioned at all in any of the interviews with teachers and administrators, the issue now is workload. Larger salaries do not create more time in the day.

Based on these results we propose that instead of focusing on increasing teacher salaries in the near term, the DepEd human resources offices do a study of the administrative staffing requirements of schools and study the costs of adding those plantilla positions for schools urgently. There are well-established ratios already in place in other countries and in private

schools for administrative staff support to students or to teachers, these can be the starting basis for a study of the necessary resources to provide support staff to teachers.

In the immediate term and as a temporary measure, LGUs or private sector donors can be encouraged to provide such support and make it acceptable to spend funds for this purpose in place of other needs. Private companies would appreciate that this is needed and would understand how important such support staffing is to improving the work of teachers; they may be a strategic first place to lobby for support. Some public schools already have "volunteer" and internship agreements with teacher education colleges where potential hires can earn points towards their licensure and application. They are deployed to help with ALS but should also be a resource pool for getting help with processing reports and paperwork.

Mass promotion as the unspoken unofficial mode of reducing OOSC. The push to report "zero drop-out" has been in the DepEd system for a long time and has been blamed often for the unofficial practice of mass promotion. Calling it mass promotion is inaccurate as it creates the impression that this an agreed-upon practice of schools, if not of the system itself. The real picture is a complex interaction of pressures from the formal incentive system and the relationship of teachers with students.

Teachers have a well-defined system of promotions, performance evaluations, and performance bonuses both at an individual level and at a school and division level. The number of dropouts is reported by each teacher at the end of the school year, and then aggregated up the chain of reporting all the way to the Central Office. The number of dropouts in each class can be traced back, therefore, to the teacher, whose performance is reviewed and assessed in multiple levels in some part with dropout rates in their class as a metric. There are many layers of formal incentives for teachers to push for zero dropout, and in many ways this is positive. They have reason to pay attention each student, figure out the reasons they suffer from chronic absenteeism, and visit homes and talk to parents to try to keep all children in their class in school. The flipside of this is quality; teachers have the autonomy to promote students to the next level regardless of performance.

The signaling for zero dropout targets run throughout the system. If a child flunks their examinations or did not complete the minimum number of days to qualify for a promotion to the next level, the teachers should hold back for the grade. Each child that fails or is held back has to be explained, teachers have to write out an explanation on a submitted form. Their principals will ask them to report, they have to justify each child's status. This makes teachers feel like it is always their fault when children get held back or drop out, and signals to them that the system would rather push the children up the grade rather than risk them leaving school if they fail. Multiple times teachers bring up the fact that the PBB is tied to the dropout rate.

At a more personal level, teachers usually have intimate knowledge of students' personal challenges. During home visitations they learn how much of a challenge it is for students to come to school, children are hungry, have to work, or are primary caretakers for their younger siblings. Teachers are personally affected; they feel bad for the children and give them plenty of space to fail or skip school, then still will send them to the next grade level.

In the absence of other clearer student-performance-based measure that can be traced back to the quality of teaching, dropout rates become the metric for teacher quality. This sends a problematic incentive signal to teachers that they are evaluated based on zero dropout rates and not the quality of learning of students. Mass promotion is the resulting behavior to this, even students who failed exams or skipped half of the year's school days get promoted. Some of these students will end up in 7th grade without knowing how to read for comprehension. The problem then gets pushed up to high school where, when students have difficulty following the lessons, are discouraged then start exhibiting attitude and motivation problems.

This is all connected to the finding in the national surveys that in high school, the main reason children leave school is because of lack of interest. Those who are at risk of dropping out are mostly children who are flunking their classes, they are not following the lessons, they are having trouble understanding their books and passing their exams. They eventually lose motivation to study, because they would be sitting in class throughout a day not understanding anything. Active high schools offer remedial reading classes as soon as the nonreaders move to their school, it helps and probably should be scaled up, but ideally the solution is in the elementary grade levels. Students who have insufficient reading comprehension should be guided in the early years so that the learning backlog is not insurmountable. The World Bank has supported the DepED in the implementation of Early Grade Reading Assessment (EGRA), but there may be a disconnect in the implementation and analysis of EGRA data.

The good news is that teachers and principals know that mass promotion is bad practice and should be stopped. Certainly, striking the correct balance between ensuring completion and securing good quality education is not easy, but there must be bright lines that cannot be crossed along the way. For example, one school adopted recently a "no reading, no promotion" practice. All children were assessed at Grade 1 and then weak readers required to do remediation classes and get to reader-status before they are promoted to Grade 2. It seems that in fact it is in the early grades where the catch-up is best done. Smaller children are easier to control, can learn more readily, and do not yet have the autonomy to just stop attending school. Sending nonreaders to high school should be actively discouraged and feeder elementary schools that allow this require close monitoring and supervision, even without sanctions, the signaling from DepEd that it is poor practice needs to be stronger.

Physical access. Although less of a problem now than in years past, physical access to schools remains an issue for a subset of the population. Some initial research and mapping by UP NIP Instrumentation Lab point to specific areas where the catchment of public secondary schools are insufficient for all public primary schools (Rubio et al, 2018; Damian, et al, 2018). These are areas in CAR, ARMM, Region X, and Region XIII. Improving transportation systems have been shown to increase school attendance for both males and females (Francisco & Helble, 2017). An impact study of the Roll-on/Roll-off (Ro-Ro) system in the Philippines which became operational in 2012 showed increased school attendance among children in municipalities near the Ro-Ro ports, among both genders for primary school, and among females in secondary and tertiary levels. There is a larger increase among male students as primary and secondary levels, which suggests that the reduced cost of attending school was able to offset possible opportunity costs of available work for males.

These increases in attendance could be attributed to reduced cost of traveling to school or the improved economic status of communities that were hard-to-reach before the Ro-Ro system was available, and thus, increased ability of parents to pay for schooling. The study evaluated changes in household income in the same municipalities, using data on tax revenue as a proxy, showing empirical evidence of increases in household incomes, which, in turn, would increase capacity to send children to school.

In all the provincial sites visited for this study, there are communities that are too far away from the nearest high school. Sometimes even the nearest elementary school is in the same barangay but still is inaccessible because of the terrain (students have to cross bodies of water, or climb steep hills). The communities with very limited access are IP groups, resettlement and relocation sites, and island communities. For elementary level some sites have multigrade schools, then when areas get enough students the division moves to create integrated schools (adding high school level even when the student body is small).

Access to high school is particularly acute for many areas. Cost or time of transportation from a family's village to the nearest school could be prohibitive. These are factors that make it likely a student will start a year but fail to complete it. The communities that are far from high schools become targets for ALS teachers because they have large populations of adults without a high school degree. ALS teachers travel to the communities to deliver education.

A thorough assessment of the location of these remote communities and the number of underserved school-aged children in each of them can help DepEd plan for the appropriate interventions. Building more schools may not be cost-effective for some areas; alternative solutions for access to formal schooling can be proposed such as providing transportation solutions or dormitories. Knowledge of the availability of basic education in terms of physical access has not been updated to account for Senior High School levels.

Supply of materials. Supplies provided to students, like books, laboratory equipment, and computers are still insufficient. Prioritization of expenses should be done based on which inputs add the most value to the quality of education and the ability of students to complete the full cycle. For example, while computers are good to have, they often are in principle available but not effectively used because of the size of the classes or the ability of teachers to use them for real lessons. On the other hand, having one set of books for each student may be an incremental spend, but can have larger impacts on student performance especially if they can bring home all their books and write on the margins and keep them after the year is over. The system of prioritizing spending on different inputs may be best understood based on the school's experience, absent empirical analysis on impacts based on data. Even without data, the observations of teachers as to inputs that matter more and the relative impacts of each input to student learning outcomes should matter in the decisions on resource allocations.

LGU support to specific needs. There are problems that LGUs from the city level to the barangay level are in a better position to address than the local schools. For example, truancy, rampant availability of Internet shops hosting students during school hours, noise level in the community, safety, and transportation support are all issues that come up for urban schools, and mostly their administrative leaders are at a loss for solutions except for policing students to stay inside school premises during the day. Schools need support from local governments to provide a supportive environment for education and learning.

City governments have more funds to support education; many of these resources go directly to students. In Paranaque for example the city government gave out transportation allowances of PhP500 per student per month after finding out that fare expense was one of the main constraints to completion. Less affluent LGUs allow the schools to borrow their service vehicle for trips, or use of facilities for activities.

4Ps support. All participants in the interviews were asked about their experiences with the 4Ps subsidies. Parents and students attest that these help them in their daily needs and provides the resources they need to keep up with the costs of education. Teachers say that it helps ensure that students make it to school, but does not help students get the stability and predictability needed at home to improve their academic performance. It is in many ways an additional burden on teachers because they are put in a place where they are the barrier for some families to access 4Ps funds. Their certification is needed for attendance, and so when children are not able to meet all the days of schooling, parents and children plead with the teachers or in some cases can even threaten them. It is important to acknowledge this role that teachers and schools play so that cushions and protections can be adopted to shield teachers from such incidents. In general, though all teachers that participated in this study are supportive of the 4Ps program and consider it effective.

Urban schools. As was mentioned in the 2012 report on OOSC barriers, the multitude of challenges faced by schools in dense urban areas need to be systematically examined and addressed. NCR alone accounts for a large enough mass of schools that share the same challenges, it deserves its own study and its own set of solutions. Some of the acute problems unique to dense urban communities are: severe shortage of infrastructure leading to large class sizes, crime in the communities, easily availability of vices, hunger among elementary-aged children, acute poverty especially for transient families, and possibly higher levels of physical abuse because the urban poor children are often left without adult supervision.

On top of all this, we hear from teachers and principals that students in urban schools or those who were transferred to a rural school from an urban community, have less respect for the authority of school personnel. The young teenagers in high school sometimes curse, threaten, laugh at, bully, and steal from their teachers. Young female teachers bear the brunt of this from older boys in high schools, and things can go far enough that the teachers express real fear for their safety. The result of this culturally distinct feature of urban communities is that teachers can get more hostile. They are less likely to go the extra mile to take care of students who are on the verge of dropping out, and they sometimes, at the end of their ropes, asking for corporal punishment to be returned as an acceptable disciplinary measure.

Urban poor communities present children with very difficult circumstances within which they have to somehow attend school everyday, do homework, study at home, stay away from trouble, and thrive physically and mentally outside the school. It is in urban areas that elementary aged children will come to school hungry, because unlike in rural families where food is inexpensive and available, when in the city the absence of income means the complete absence of food. There are still high schools that resort to shifting because of a shortage of classrooms, since land is sparse and expensive in cities, schools are unable to expand. Urban schools have many students that are essentially transients, poor families that moved from the province to the city to find work, then will later return to the province when work is no longer available. Many students in poor communities are growing up without parental supervision, they are either separated from parents and left to other family members, or have parents illequipped to guide children through their education.

5. Recommendations for systematically addressing OOSC problem

In this section, we provide some suggestions to address supply and demand side barriers to schooling. But before we mention these in detail, we also suggest that in its APIS questionnaire, the PSA provide a follow-up question if respondent report that children are not in school due to "lack of personal interest".

Please tell us which of the following were true when your child left school (multiple response):

- Grades were low
- Child was older than their classmates
- Child had difficulty reading or following the lessons
- Child experienced bullying –
- Child did not like the teacher
- Parents are separated
- A parent is away for work
- Child refused to go to school without explanation
- Child was influenced by friends (i.e. barkada) Child had previously moved schools

in order for DepED and other stakeholders to break down what "lack of interest" means, and consequently determine the specific interventions required. Finally given the wealth of data available, DepED and education stakeholder need to learn from available data, and harness this knowledge to produce better education outcomes, so that no child will be left behind.

5.1. Teachers

The main and urgent recommendation to address the last mile concerns as well as the poor quality of education children receive in many schools is to address the human resources allocations of the DepEd. In particular, in order to deload teachers of administrative and other duties unrelated to teaching, the Department needs to study their human resources shortages. These are to fill in for administrative tasks like registration and records keeping, secretarial work for the principal's office, financial reporting, guidance counseling, and other "additional assignments" that are normally distributed to regular teaching faculty. Adding plantilla positions are always a multiyear project, while the Department is sorting this out, it may help to have the private sector support channeled toward providing administrative support to schools. Private elementary and high schools have regular non-teaching administration staffing, there are experienced people in the workforce who can do this kind of support work. Alternatively, working with Bachelor's programs in elementary and secondary education to have undergraduate students spend a semester or a year everyday in a public school doing this kind of work may be a manner of providing a solution for all concerned. This would need clear signaling from the DepEd Central Office as an accepted and encouraged practice and must be in coordination with the Commission on Higher Education (CHED).

The need for qualified full-time guidance counselors should help not only deload work from the teachers but also provide real support for students who are having disciplinary, attitudinal issues, as well as those who have been victims of trauma and abuse. It is clear that with the large cohort of students with parents working away from the home (OFW or domestic migration), school needs to provide stability and emotional support through nurturing environments and school staff who have the time to observe and listen to students. Guidance counselor positions in DepEd have very low salary grades, much lower than teachers, making it very difficult to get qualified personnel on board. DepEd has been trying to raise the salary grades for several years, but thus far, to no avail. It is unclear at this moment if this is nearing success. Further to the salaries, there are simply not enough certified guidance counselors to hire, although this may change if the DepEd salaries are raised as it can signal a market demand toward colleges and more students will choose the proper courses to obtain a certification for guidance counseling.

Reducing teacher workload needs to be systematic and evidence-based. In 2014 the earlier version of this paper already strongly recommended a time-use study for teachers, this has not been done. A proper and rigorous time use study can provide a clear and convincing picture of which types of work are necessary and unnecessary, which should be delegated to others, and which have to be pushed away from teachers' plates. Right now the outcry is just that there is too much work, and that instead of paying attention to teaching the teachers are busy filling out paperwork, writing reports, and attending trainings. A more specific breakdown of the exact workload of a regular teacher, the sources of work (e.g. assignments from other agencies), and the amount of time left for student contact and actual teaching, will allow the DepEd to pinpoint where there pressures are coming from. The inordinate and cumulative workload placed on the DepEd by other agencies certainly deserves close scrutiny and auditing, and armed with evidence, the Department can have clearer reasons for saying no to further assignments or to demand larger budget allocation and personnel to cope with the non-education assignments.

Teachers attend multiple trainings and seminars in a given year; this is an additional source of time use and includes any number of topic areas from pedagogical techniques, to technical writing for reports, to DRRM activities. International agencies, academe, CSOs, and private sector donors are always wanting to offer or recommend trainings. It is unclear if DepEd has a system for rationalizing and systematizing all teacher trainings, especially those that are mass trainings, since there may be too many of them and the net effect may be to distract teachers from their core function of effective teaching (just from time displacement). There is certainly importance for teacher training, but the time each teacher spends on training in each year should be planned, limited, and strategic based on a career tracking system that is clear to the faculty corps. Teachers are meant to facilitate learning; they should also be models of lifelong learning, especially given the impact of emerging technologies of the Fourth Industrial Revolution on the vastly changing job market (Albert et al. 2018)

5.2. LGU and community

There are problems like computer shops, disciplinary issues, and truancy that clearly needs close LGU cooperation. Other forms of active LGU support is in ALS and intermittent support to operational needs. Many principals and division officials say that there is no direct relationship between the LGU and the education units, except for the seat on the SEF board. DepED needs to be strategic in collaborating with the Department of Interior and Local Governments, and in finding advocacy champions at the field level, whether among the local chief executives or community leaders.

Meanwhile many schools are helpless against the easy availability of computer shops and drinking areas near schools that operate during school hours. Aside from prohibiting children

from leaving the premises, there is little teachers can really do by themselves to compel business owners to comply with local ordinances against entertaining students during school hours. For this the LGU (barangay to municipal) should be at the frontline.

5.3. Scaling up best practices

There are many examples of effective small initiatives in individual schools or divisions, these are sometimes transplanted to the next one when the champion of that initiative is redeployed to a different area. It is unclear if the DepEd has a mechanism to host knowledge that emanates from the schools and broadcast it to the rest of the bureaucracy as a "good practice" so that these small initiatives can be adopted in other areas. One great example that we heard about from two schools is peer guidance or mentoring. Low performing students are paired up with high performing ones, shoring up interest in school and providing emotional and social support along the way. It has kept high school children from dropping out. In elementary schools there are some that have institutionalized a process to catch nonreaders early, students are assessed in first grade and are not promoted to the next grade without achieving reader status. They do this through a combination of intensive remedial reading but also pairing up students into working groups.

5.4. Re-examine the practice of putting low performing students together in a class

In many schools the formal policy is to have an advanced section of high performers, then all the other students are randomly assigned to sections. However, many of the schools visited say they have a "last section," but deny that they group students according to performance. Teachers assigned to these classes are often in this project's FGDs because they deal with many of the SARDOs. Many of the teachers are young and only a few years into their career, they have to deal with students with special challenges and are often not given support in dealing with the lowest performing students with a history of absenteeism and some with disciplinary issues. There are two options in dealing with the unofficial policy of putting challenging children in one section. One option is to discontinue the practice altogether, give the low performing students an environment where their peers are supporting their growth and where they have a chance to learn from classmates who are doing better than they are. Another is to retain the practice but give the class special treatment in terms of teacher support. For example, assign the most experienced teacher, in many of these last section classes the students (especially in high school) are majority male and thus it makes sense to assign a male homeroom teacher who may be in a better position to discipline unruly male teenagers in class. Regardless of the main homeroom teacher, last section classes can be given further infusion of support through materials, teaching hours, activities that are not lecture-based, and other alternative learning situations that can keep students of this profile motivated to take an interest in academics.

5.5. Dealing with overaged and chronically low performing children

Being overaged for the grade puts children, especially older children, at a very high risk of eventually dropping out. Some are old because they have learning difficulties and were held back a grade, others had dropped out before and restarted a grade, others started schooling late.

They are subject to bullying or become the bully themselves; they lose motivation to stay engaged in school. When possible, explore or experiment with using ADMs to help these students not only catch up to their delayed grade level, but eventually skip a grade so they can be with their cohort.

5.6. Providing support for students with very low-education parents

As discussed earlier, quantitative and qualitative evidence shows the complex ways that low education of parents negatively impacts the schooling of children. There are parents who are less than a 6th grade education and these are families where children will be in constant risk of dropping out because they have little guidance and support from parents, not because parents don't value school but because they don't have the time nor the ability to provide guidance. Profiling students from such families can help in early identification of the cohorts within a class, and innovative programs can be designed to help those students stay in school and get the adult guidance they need on academics.

Further, the ALS program catches some portion of the undereducated parents, and formal schools can also aim to help design learning programs that will engage with parents' continuing education. This is especially important for those parents who did not even reach high school as those are the most vulnerable and creates further constraints on their children's education.

5.7. Autonomy to create solutions

While the broad causes of dropping out from school are shared in many areas, the manner in which these play out differs from place to place. Giving the lower levels of DepEd (e.g. Division or school) some level of autonomy and flexibility to innovate and find solutions that work for their locality can help address specific needs of communities. For example, in Baclaran, the peak times for child employment are Wednesdays and Christmas season while in Bukidnon, the students disappear for 2-3 weeks during harvest season and planting season. Both of these areas can benefit from flexibility to schedule their academic calendar around the natural rhythms of their communities. It is possible that, in principle, such adjustments are allowed, for instance there is wide understanding that in disaster situations ADMs kick in and the schedule becomes flexible. However, under normal circumstances perhaps school administrators, division chiefs, and teachers do not think they have the power to introduce solutions that deviate from the rules in DepEd Memos.

Creating a culture of innovation in education delivery will require, for an agency with such a centralized ethos, clear signaling and incentives from the top levels to the schools. Incentive systems like awards or innovation grants or citations for solutions may provide that signaling mechanism that would inform the hundreds of thousands of teachers that the institution values innovative thinking and initiative so long as those innovations preserve or improve quality of education along the way. When solutions have worked for one locality, giving these innovations visibility across the system as part of a set of "best practices" can provide both the reward and the momentum to scale up solutions based still, on the initiatives of teachers.

We will relate this back to overloading teachers on paperwork and other nonteaching tasks. Innovating and thinking of solutions requires headspace, focus, time to analyze and process information. Overworked and overloaded teachers will have no time to think of solutions, because thinking of solutions and problem-solving the implementation of solutions requires time.

5.8. Reading programs in early grades

It appears critical to engender reading comprehension and a willingness and interest in reading in the early grades for students to stay motivated throughout their education. In almost all schools reading is something students have to do to go through the lessons, there are no activities specific to encouraging reading for leisure or even to have non-textbooks and workbooks available for students to read while in school premises (libraries are stocked with textbooks). Appreciation for reading means appreciation for stories, narratives, and children learn critical thinking through reading and listening to teachers read which provides modeling opportunities that are important for older children. Beyond the most simple reading ability needed to clear Grades 1-3, further reading appreciation programs can be encourage through private donors or community engagements. These just need to be provided as a mechanism for support with packages available for interested donors. Over the long run of course, the DepEd can start considering building it into the budgets, mindful of the constraints that institutions such as COA and DBM will place in front of them (loss of books is normal in libraries, these should not keep teachers and principals from maintaining one because of audit snags).

5.9. Ultimately reduction of poverty and vulnerability remains key

While the specific direct and indirect causes for being OOSC are enumerated separately throughout this paper, the majority of these are linked to high levels of poverty in communities. Large family sizes, transience of families, unstable home conditions where children are left without adult guidance, the accumulated effects of chronic hunger and undernutrition, early pregnancy are all closely linked to poverty conditions of a family. Poor families live in communities that are also largely poor, which introduces further dynamics to the environment within which schools operate. Poverty, however, is not static: some of the poor manage to exit from poverty, and some of the non-poor fall into poverty.

Poverty conditions present children with multiple interacting barriers to not only attending school, but also realizing their full academic potential. Schools and teachers are only able to address the needs related to schooling, those that would support children who have difficult conditions at home, but they cannot control the conditions within the home and around the community. There are clearly efforts to extend the influence of teachers, through, for example, home visitations for students with high absenteeism and even school feeding. There are two important issues that need to be addressed by the DepEd and the broader government institutions. First, where does the responsibility of the teachers and schools end in terms of helping children in extreme poverty conditions to stay in school? To what specific extent to we expect the education system to address the barriers to schooling that fall outside of the fences schools (e.g. lack of money, food, trauma, truancy, absence of parental support) and is it reasonable, fair, and properly funded? It may be reasonable, and if there are expectations these should be properly supported with manpower and funding. Second, where the mandate of the education system stops, who in the rest of government picks it up? In the varied influences and responsible actors in a child's life, which agencies and offices of government should be taking

responsibility for children's welfare? For example, domestic abuse and trauma should be with DSWD and LGUs. Truancy and the presence of computer shops in the vicinity of schools, which allow students during school hours should be policed by the LGUs. When siblings are left to fend for themselves while parents are out working need the help of social workers. Health conditions that keep children from school should be the responsibility of health workers. Preventing early pregnancies should be a priority where cooperation between educators, social workers, and even civil society organizations are needed. Well-meaning but extremely poor and undereducated parents who cannot guide their children's schooling could use the cooperative assistance of educators, social workers, and local governments.

Government programs to address poverty do not appear to be differentiated in terms of levels of poverty conditions and types of assistance necessary. The 4Ps is a good start but should only be considered a start, supporting interventions that provide the kind of help needed by families in extreme poverty conditions who have children. For those in extreme poverty the 4Ps support is not sufficient to allow children to attend school on a regular basis, while for those near the poverty line it may be the only support needed. Most government programs for poverty alleviation seem to treat all families below the poverty line uniformly, and have yet to design interventions around the multifaceted nature of support needed by some families who are burdened not only by insufficient income but also low levels of education of parents, undernutrition, and vulnerability to income shocks.

The complexity of addressing impacts of extreme poverty on children's education (and health) seems well-understood by teachers and others in the education system. They have a unique perspective that focuses holistically on the welfare of the child, and treats all other issues of poverty as causes of pressure and constraints on children. Long-term poverty alleviation goals must pay close attention to all children if intergenerational poverty is to be broken. Child-centered poverty alleviation programs will require close coordination between government agencies with mandates to protect and promote the welfare of children. Lifting a family out of poverty, only to have the children ending up with poor academic training, poor socio-emotional skills, and absence of social support systems from community will mean that the non-poor status of the next generation remains tenuous.

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