



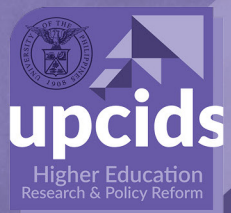
UNIVERSITY OF THE PHILIPPINES
**CENTER FOR INTEGRATIVE AND
DEVELOPMENT STUDIES**

UP CIDS DISCUSSION PAPER SERIES 18-003

Teacher Education in the Philippines: Are we meeting the demand for quantity and quality?

CLARISSA C. DAVID,
GEOFFREY DUCANES,
KAROL MARK YEE, and
IAN NICOLE GENERALAO

ISSN 2619-7448 (PRINT)
ISSN 2619-7456 (ONLINE)



UP CIDS DISCUSSION PAPER SERIES 18-003
ISSN 2619-7448 (PRINT)
ISSN 2619-7456 (ONLINE)

Teacher Education in the Philippines: Are we meeting the demand for quantity and quality?

CLARISSA C. DAVID, GEOFFREY DUCANES,
KAROL MARK YEE, and IAN NICOLE GENERALAO



University of the Philippines
CENTER FOR INTEGRATIVE AND DEVELOPMENT STUDIES

Lower Ground Floor, Ang Bahay ng Alumni, UP Diliman, Quezon City
Telephone: 981-8500 loc. 4266-4267 & 435-9283 / Telefax: 426-0955
E-mail: cids@up.edu.ph / cidspublications@up.edu.ph
Website: cids.up.edu.ph

Teacher Education in the Philippines: Are we meeting the demand for quantity and quality?¹

CLARISSA C. DAVID, Ph.D., GEOFFREY DUCANES, Ph.D.,
KAROL MARK YEE, and IAN NICOLE GENERALAO²

ABSTRACT

The quality and capacity of the country's basic education system relies, to a great extent, on the ability of higher education institutions (HEIs) to train a sufficient number of promising teachers to hire annually. This discussion paper seeks to describe the state of teacher education in HEIs as reflected by their performance in the Licensure Examination for Teachers (LET). Analysis of the passing rates of HEIs in the LET suggests that (1) there is an insufficient total number of LET passers each year to supply the needs of the basic education sector; (2) there are areas of the country where there are troublingly low numbers of LET passers and high-performing HEIs in teacher education; and (3) a large portion of each year's LET takers are on at least their second attempt and are much less likely to pass than first-time takers. Recommendations for further research and review of the teacher professionalization tracks are discussed.

¹ This Policy Note is a publication of the UP Center for Integrative Development Studies (UP CIDS) Program on Higher Education Research and Policy Reform (HERPR), funded by the UP Office of the Vice President for Academic Affairs (UP OVPA). The Commission on Higher Education (CHED) provided data.

The opinions expressed in this publication are those of the author/s. They do not reflect nor represent the opinions or views of the University of the Philippines, the UP Center for Integrative and Development Studies, the sources of data, or its affiliates. The presentation and interpretation of information in this publication do not imply the expression of any opinion on the part of UP or UP CIDS.

² The first author is Program Convenor of UP CIDS-HERPR and Professor at the UP College of Mass Communication. The second and third authors are Senior Research Fellows of UP CIDS-HERPR and the fourth author is a Research Associate of UP CIDS-HERPR. The authors are grateful for the research assistance of Marco Zaplan and Raisa Aquino.

Sharp increases in local demand for teachers

Recent basic education reforms have increased the demand for public and private school teachers at the primary and secondary levels over the last five years. These include the full roll-out of mandatory Kindergarten education in 2012 (Republic Act No. 10157) and the K to 12 basic education curriculum in 2013 (Republic Act No. 10533), which added two more years of schooling in the form of the senior high school (SHS) program. Just for the years 2010 to 2016, which covers the implementation of the K to 12 curriculum, the Department of Education (DepEd) reported that they hired over 195,000 teachers for the Kindergarten and elementary levels.³ Between 2010 and 2017, there were 291,170 new positions created, and 112,838 of these were just for 2016 and 2017 alone. Over 67,100 teacher items created in 2016 and 2017 were for SHS, and the remainder was for Kindergarten to Grade 10. In 2018, the agency budgeted to hire over 81,000 new teachers,⁴ the bulk of which will teach in the junior high school level. The demand for new teachers extends to all private schools as well, since the expanded education cycle applies to all schools in the country.

There are 674,613 teaching positions just in the Philippine public education system for school year 2015-2016,⁵ but over 36,000 of those positions were vacant by March 2016. This does not even account for teaching positions in the private schools. Starting salaries for public school teachers went from ₱15,649 in 2010⁶ to ₱20,179 in 2018⁷ as a result of Executive Order No. 201, series 2016 (Salary Standardization Law), placing it close to double the median income for wage and salary

³ Jocelyn R. Uy, “DepEd needs teachers, lots of them,” *Philippine Daily Inquirer*, September 18, 2016, <http://newsinfo.inquirer.net/816267/dep-ed-needs-teachers-lots-of-them>.

⁴ Mara Cepeda, “DepEd allots P42B to hire 81,100 teachers in 2018,” *Rappler*, August 16, 2017, <https://www.rappler.com/nation/178812-deped-budget-2018-hiring-teachers>.

⁵ See DepEd Presentation in 2016 Philippine Education Summit

⁶ See note 3 above.

⁷ See note 5 above.

workers in the country. With the increased salaries and large numbers of unfilled positions, teaching careers have become increasingly desirable for college students across the country.

Republic Act No. 7836, enacted in 1994, requires that teachers in primary and secondary schools first pass the Licensure Examination for Teachers (LET), which, in turn, requires at least a college degree in teacher education or a related field, with additional 18 units of advanced training in teacher education if the undergraduate degree is not aligned.⁸ The standard elementary education licensure exam qualifies applicants to teach any subject in elementary school, while the exam for high school teachers have a generalized test and, for some, a specialization that qualifies them to teach in the discipline for which they passed. Currently, the DepEd is experiencing a shortage of specialized secondary school teachers in math and science to fill positions in the junior and senior high school levels.⁹

Teacher education programs: Profiles and changes over time

Teacher education is one of the most popular fields in higher education institutions (HEIs). There are over 1500 HEIs offering teacher education courses geared toward training teachers in child development, learning, and pedagogy at the college level. According to Commission on Higher Education (CHED) data, in Academic Year (AY) 2016–2017, it accounted for a total enrollment of 607,238 students, representing 17% of all enrolled college students ($n = 3,183,787$). Majority (91%) of the enrolled students are split almost equally in teacher education programs of elementary and secondary education. At the graduate level, there are 105,249 students enrolled, which is

⁸ Professional Regulation Commission. n.d. "Professional Educational Units." Professional Regulation Commission. Accessed March 2018. <http://www.prc.gov.ph/uploaded/documents/18%20PROF%20EDUC%20UNITS.pdf>.

⁹ Jocelyn R. Uy, "DepEd seeking to hire more Science, Math teachers," *Philippine Daily Inquirer*, September 16, 2016, <http://newsinfo.inquirer.net/816095/deped-seeking-to-hire-more-science-math-teachers>.

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

50% of all students in HEIs ($n = 210,122$). Total enrollment includes all students across year levels, but not all of those enrolled will graduate and not all of those who graduate will pass the LET and continue on to teach. In AY 2015–2016, there were 99,499 graduates of teacher education programs, but given the annual average LET passing rate of first-time takers, only around 60% of these graduates will be able to enter the teaching force.

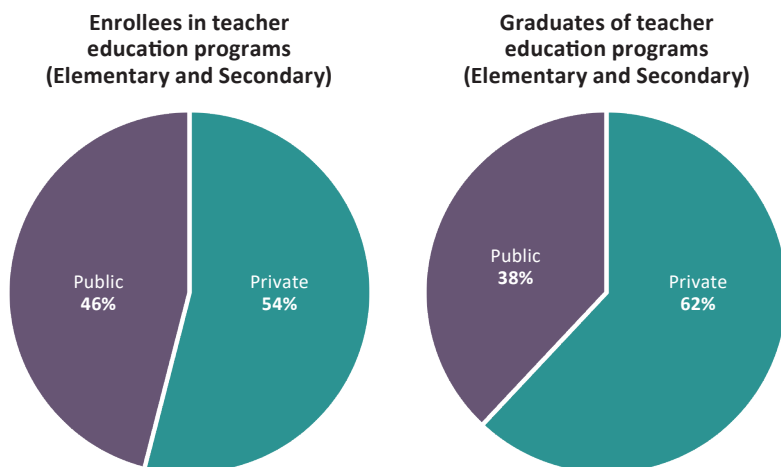


Figure 1. Public-private distribution of enrollees in and graduates of teacher education programs

Source: Authors' calculations from Commission on Higher Education (CHED) data

A large portion of enrollment (54%) and an even larger portion of graduates (62%) are in public HEIs, indicating that the odds of completing the program are better in public schools. The benefit of having teacher education programs highly concentrated in public HEIs is the efficiency in improving quality and in scaling up good ones to increase their capacities. There are large successful teacher education programs that have high performances, such as that of the Philippine Normal University (PNU) System, designated as the National Center for Teacher Education through Republic Act No. 9647. Targeting intervention and expansion through larger allotments to

fund faculty recruitment, development of learning materials, and applied education research, have the potential of effecting long-term impacts on improving the quality of education at the primary and secondary levels.

Teacher education courses clearly are in high demand, therefore, attracting more people in the teaching profession is not the challenge. Areas where efficiencies need to be pursued are improving graduation rates, quality of instruction, and LET passing rates of all programs. If larger portions of graduating students of teacher education programs pass the LET, then shortages can be reduced significantly. This is assuming that a LET system needs to remain in force, which is a policy that deserves periodic review and assessment.

A large majority of students enrolled in secondary education courses are female (71%), and in elementary education, it is even larger (80%). This tracks with the gender distribution of the teaching corps of DepEd, which in 2011 was roughly 87% female at the primary level, and 76% at the secondary level. The sharp gender disparities in student performance and completion rates at the primary and secondary levels, which seem to be widening with every year (David et al. 2009), may have some links to similar disparities in the teaching corps. There has been mixed evidence on the relationship between gender and student outcomes. With the observation that girls outperform boys in school, Holmlund and Sund (2008) investigated whether this gender performance gap can be attributed to the dominance of females in the teacher profession. However, their study did not find sufficient evidence that same-sex teacher assignment has a positive causal effect on student outcomes. Similarly, Winters et al. (2013) obtained mixed results in different levels of basic education from public high school students in Florida. That is, no statistically significant difference between same-sex teacher assignments and student achievement was found in the elementary level but a positive albeit small effect in the middle and high school levels. Sansone (2017) showed the insignificance of teacher gender on student interest and

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

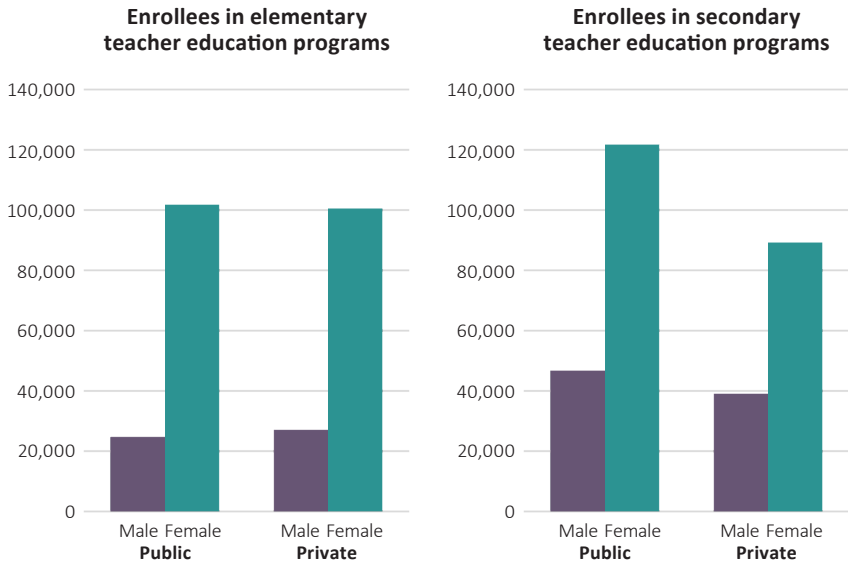


Figure 2. Enrollees in teacher education programs by sex and type of school
Source: Authors' calculations from Commission on Higher Education (CHED) data



Figure 2. Graduates of teacher education programs by sex and type of school
Source: Authors' calculations from Commission on Higher Education (CHED) data

self-efficacy in science, technology, engineering, and math (STEM) after considering teacher behaviors and attitudes.

Compounding the issue of total teacher shortages in the primary and secondary education system is the wide disparity in the distribution of these shortages by area and by specialization. The recent full rollout of SHS, while due and certainly a positive policy reform, exacerbated the shortages in supply of teachers with specializations, especially in science and mathematics. National development plans for higher education, labor policies, and even economic restructuring to increase the manufacturing sector, all require a focus on and the expansion of STEM education at the tertiary level. Attracting large numbers of students into STEM fields in college means providing solid foundational teaching of mathematics and the sciences at the earlier education levels. High-quality teaching at the SHS level will, in turn, require teachers that have the necessary preparation to teach these fields, ideally a full bachelor's degree in one of these disciplines. Data are not yet available for the teacher distributions for these positions with required specializations, but it is an area that is urgently needed

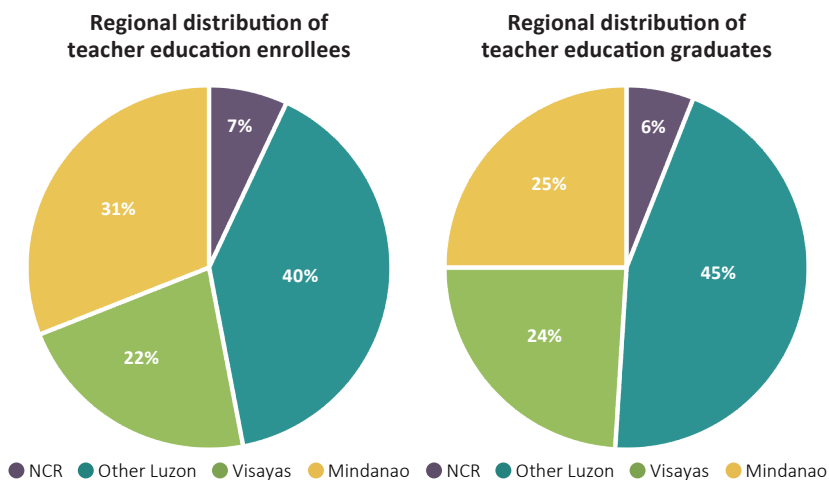


Figure 4. Regional distribution of teacher education enrollees and graduates

Source: Authors' calculations from Commission on Higher Education (CHED) data

to be studied to provide specific programmatic recommendations for HEIs and CHED.

Program cost

There is a vast difference in total program cost to Teacher Education students between public and private HEIs and across regions (*See* Table 1). Program cost refers to the amount that is charged to the student and not the full program cost that reflects subsidies of the government to all public HEIs.

Table 1. Average program cost differential (private – public) by region¹⁰

Region	Number of schools	Average program cost		Difference (private – public)
		Private TEIs	Public TEIs	
Autonomous Region in Muslim Mindanao (ARMM)	57	52,894.58	19,550.54	33,344.04
Cordillera Administrative Region (CAR)	35	98,868.19	44,934.34	53,933.85
National Capital Region (NCR)	135	145,083.56	6,546.05	138,537.51
Negros Island Region (NIR)	52	113,337.12	27,011.22	86,325.90
Region I (Ilocos Region)	75	92,188.46	81,408.13	10,780.32
Region II (Cagayan Valley)	53	81,570.90	22,904.17	58,666.73
Region III (Central Luzon)	143	91,287.76	35,231.27	56,056.49
Region IV-A (CALABARZON)	181	125,666.59	19,720.09	105,946.50
Region IV-B (MIMAROPA)	60	82,548.95	24,674.18	57,874.77
Region V (Bicol Region)	96	113,600.45	30,336.20	83,264.25
Region VI (Western Visayas)	56	115,865.34	32,657.76	83,207.59
Region VII (Central Visayas)	92	100,975.76	26,839.85	74,135.91

¹⁰ Only Elementary and Secondary Education programs were included here given the reliability of its program cost data.

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

Region	Number of schools	Average program cost		Difference (private – public)
		Private TEIs	Public TEIs	
Region VIII (Eastern Visayas)	65	72,547.18	23,014.96	49,532.22
Region IX (Zamboanga Peninsula)	53	100,186.83	44,883.81	55,303.02
Region X (Northern Mindanao)	73	116,606.38	40,531.95	76,074.43
Region XI (Davao Region)	71	105,441.75	27,523.99	77,917.76
Region XII (Soccsksargen)	55	93,548.48	21,932.31	71,616.16

Source: Authors' calculations from Commission on Higher Education (CHED) data

Based on CHED data, the average program cost for large public HEIs is ₱26,002 (prior to the enactment of the Free Tuition Law), which is the lowest program cost across subgroups in Table 2, and as a group, large public HEIs have some of the best performing teacher education programs. These programs are heavily subsidized, with some universities charging as low as ₱25 per unit, while the actual cost of educating a student for the full cycle remains unknown. By contrast, studying in a large private HEI would cost ₱126,160 on average, and ₱94,421 in a small private HEI.

Table 2. Total program cost to student in public and private HEIs

HEI size	Public HEIs	Private HEIs
Large	26,002.57	126,160.26
Medium	34,628.13	131,676.82
Small	28,487.32	94,421.97

Source: Authors' calculations from Commission on Higher Education (CHED) data

Further calculations of actual program costs in public HEIs, both high- and low-performing ones, should be conducted in order to get an accurate sense of a reasonable total program cost. Such a study would allow planners to allot more funds where needed, assess the total amount of government subsidies that need to be channeled to teacher education programs in order to improve performance, and get a good sense of the total investment required to educate a high-performing corps of public primary and secondary education teachers.

Role of teacher performance in the quality of education

There is a wide literature indicating the importance of teacher quality on whether students achieve learning outcomes, thus improving the performance of a country's teaching corps is one of the critical means by which it can shore up overall quality of education. Darling-Hammond (2010, 38) summarized that in the United States, research has shown that "students of color and low-income and low-performing students, particularly in urban and poor rural areas, are disproportionately taught by less qualified teachers." In countries such as Finland, Canada, and Singapore where standards for teachers are very high, the educational systems are advanced. In Finland, all teachers are required to earn at least a master's degree in education on top of a bachelor's degree in one or more content areas to teach in the primary grades. There are even rules as to which universities are qualified to train teachers, namely, a handful in the country that have strong research programs as well. Ontario implements an induction program for new teachers that includes strict professional development and appraisal tracks. In Singapore there is a well-developed performance system to evaluate teacher skills, knowledge, and attitudes at each stage of his/her career (Darling-Hammond and Rothman 2011).

Efforts to improve teacher quality have often been led by calls to increase salaries. In recent years, there have been significant increases to teacher salaries in the public sector (where the vast majority are employed), so much so that public teacher positions are more attractive than private ones. The benefits of public sector jobs are greater than in private ones, including bonuses, leave days, and retirement packages. However, Hanushek et al. (2005) found that higher salaries do not attract more effective teachers. In addition, Hanushek and Rivkin (2006) presented econometric evidence suggesting no strong support to the notion that salaries are a good measure of teacher quality. Policy responses to improving teacher quality must go beyond the issue of salaries. It must be coupled with

the establishment of higher standards and institutionalization of effective capacity-building programs.

In the Philippines, there are some (albeit) scant research on program quality at the level of HEIs. The metric readily available to assess program outcomes is the Professional Regulation Commission (PRC) LET passing rates. CHED's own system provides an assessment which is used to award high-quality programs with the status of Center of Excellence (COE) or Center of Development (COD). The former confers a higher stature, with the COD classification conceived as a step toward COE status, in hopes of providing incentives for programs to improve toward COE recognition. The CHED system of assessment examines specific aspects of programs, including faculty qualifications, research activities, student evaluations, and facilities. In a comparison of LET passing rates, Ladia et al. (2012) find that COE programs score significantly higher than non-COE programs. However, this does not hold with COD programs whose LET performance do not significantly differ with non-COD programs. The authors also identified a handful of programs which warrants further review because of their subpar performance.

Results of Licensure Examination for Teachers (LET)

Of all the licensure exams administered by the PRC, the LET has the largest number of takers. Figure 5 shows the total number of takers and passers of the LET in the last five years. These are broken down into 200,260 passers out of 663,645 takers for elementary education, and 244,385 passers out of 707,204 takers for secondary education.¹¹ The number of LET takers has been increasing steadily over the past seven years, with elementary LET takers growing from 70,132 in 2010 to 119,091 in 2016. In the secondary LET, takers had more than doubled from 63,575 to 144,588 for the same period. In the 2017 LET, 263,679 took the test and 85,361 passed, resulting in an overall passing rate of

¹¹ Note that a repeat-taker can be counted multiple times in the number of takers.

32.37%. Those who took the test for the first time had a higher passing rate of 54.50%. These volumes of teachers being licensed annually, even though large in number, are still not enough to fill all positions in the public school system alone. According to the DepEd, given the total number of LET passers in 2017, even if all are hired by the agency, there remains a shortfall of over 10,000 teachers for the 2018 cycle.

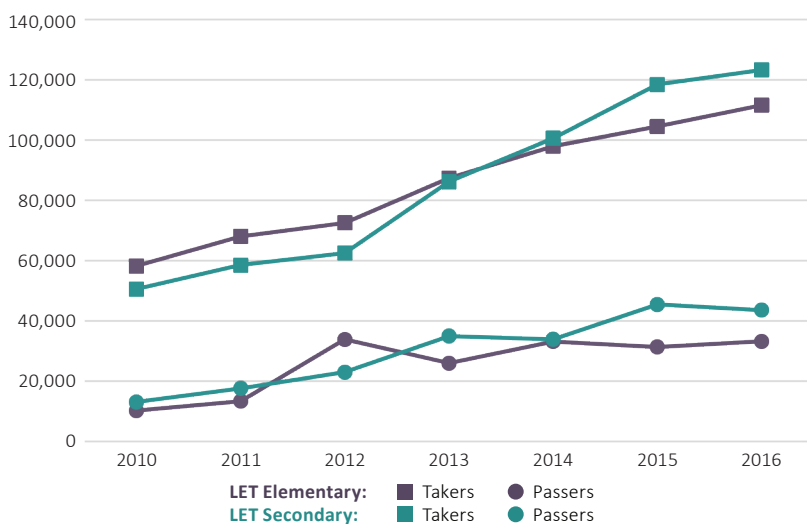


Figure 5. Total number of overall LET takers and passers, 2010–2016

Source: Authors' calculations from Professional Regulation Commission (PRC) data

To study the quality of higher education training that aspiring teachers receive, we use the LET passing rates of HEIs, focusing only on first-time takers. Since the PRC allows examinees to make multiple attempts to pass the exam and repeat takers generally have a lower likelihood of passing, we argue that using first-time takers only in assessing program quality is more accurate. Between 2010 and 2012, the overall passing rates of first-time takers of the elementary school LET increased dramatically from 27.3% to 75% but has since experienced steady declines down to the 2016 level of 50%. The one-year sharp increase between 2011 and 2012 is likely attributable to a

change in features of the exam rather than a real improvement in the quality of HEI instruction. For the secondary school LET, improvement has been steady: in 2010, the average passing rate was 33.3%, by 2013, this had peaked to 60%, and in 2016, it declined again to 50%. Note that passing rates for repeat takers are substantially lower (See Figure 6). In 2016, for instance, passing rate for repeat LET takers at the elementary level was only 14.3% and only 12.9% at the secondary level.

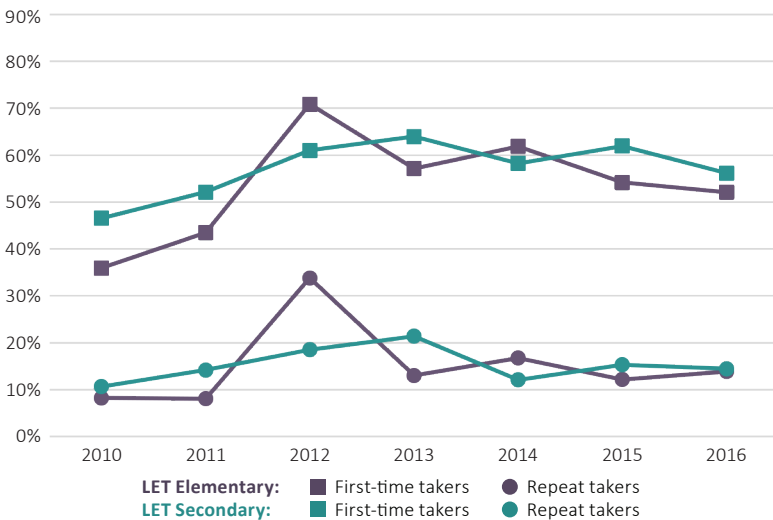
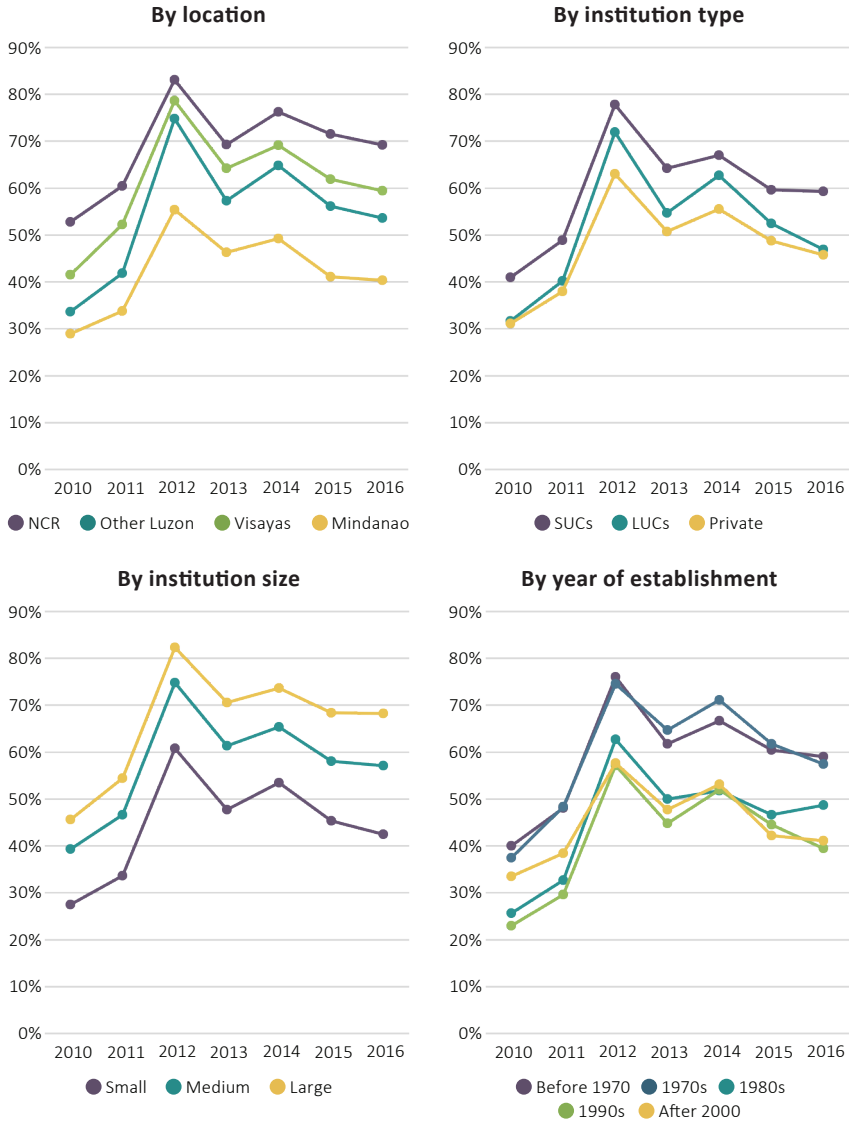


Figure 6. Passing rates (%) of LET first-time and repeat takers, 2010–2016
 Source: Authors’ calculations from Professional Regulation Commission (PRC) data

Which programs do better?

Focusing on geographical differences, both elementary and high school teacher education institutions (TEIs) in the National Capital Region (NCR) and Visayas consistently do better than those in the rest of the country. In particular, schools in Mindanao have an average passing rate in the LET elementary level of only 40.5% in 2016, compared to 59.4% in Visayas.

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

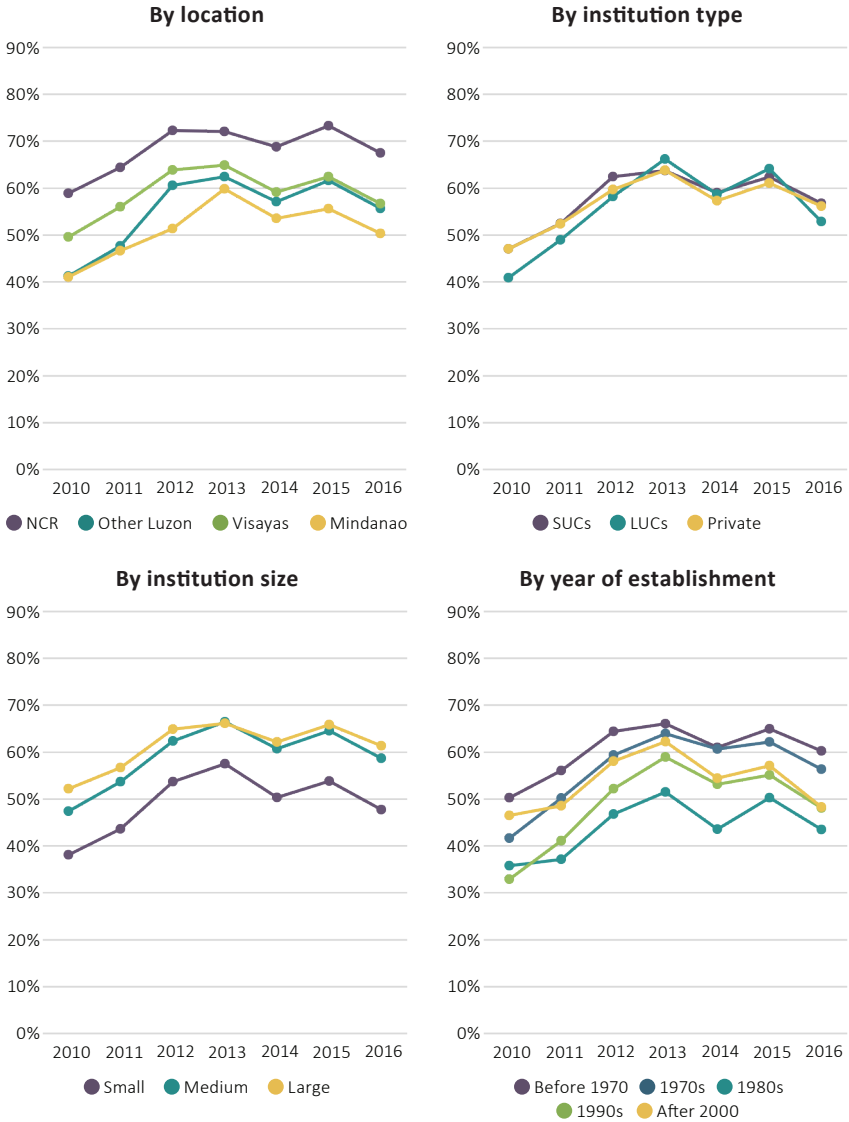


Note: Only schools with at least 10 takers in 4 of the 7 years were included. Also, only performances of first-time takers were analyzed.

Figure 7. TEI performance in the LET (Elementary), 2010–2016

Source: Authors' calculations from Professional Regulation Commission (PRC) and Commission on Higher Education (CHED) data

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM



Note: Only schools with at least 10 takers in 4 of the 7 years were included. Also, only performances of first-time takers were analyzed.

Figure 8. TEI performance in the LET (Secondary), 2010–2016

Source: Authors’ calculations from Professional Regulation Commission (PRC) and Commission on Higher Education (CHED) data

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

Tables 3 and 4 show the number of high-performing and low-performing schools in each of the areas in LET elementary and secondary levels. In Mindanao, 14% (n=40) of the schools are low-performing in the elementary LET, comprising 85.1% of all low-performing schools in the country. There are only 30 high-performing schools in the elementary LET in the entire island group and the regional distributions in Table 4 below suggest that there are regions with very few good teacher education programs.

Table 3. Number of low-performing and high-performing schools in the LET (Elementary) by location

Island Group	Number of low-performing schools	%	Number of high-performing schools	%	Number of schools in category	%
NCR	1	2.1%	27	19.3%	89	8.8%
Other Luzon	4	8.5%	50	35.7%	447	44.0%
Visayas	2	4.3%	33	23.6%	200	19.7%
Mindanao	40	85.1%	30	21.4%	279	27.5%
Total	47	100.0%	140	100.0%	1,015	100.0%

Classification: Low-performing schools are those with at most 25% passing rate in at least 4 of the 7 years from 2010 to 2016; high-performing schools are those with at least 75% passing rate in at least 4 of the 7 years from 2010 to 2016

Source: Authors' calculations from Professional Regulation Commission (PRC) and Commission on Higher Education (CHED) data

Many of the consistently high-performing schools in the secondary LET are in NCR, including Asia Pacific College, Assumption College, Ateneo de Manila University, and FEU–East Asia College. Some of the same schools are also the high-performing schools in the elementary LET, with the addition of other HEIs in NCR such as Centro Escolar University, La Consolacion College, and the main campus of the Philippine Normal University. There are consistently low-performing programs, even including those in SUCs, such as Mindanao State University in Lanao and in Sulu, Palawan State University in Coron, and Catanduanes State University. The Appendix tables to this paper provides a complete listing of these figures.

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

Table 4. Number of low-performing and high-performing schools in the LET (Secondary) by location

Island Group	Number of low-performing schools	%	Number of high-performing schools	%	Number of schools in category	%
NCR	0	0.0%	41	31.8%	184	14.9%
Other Luzon	10	17.5%	45	34.9%	566	45.8%
Visayas	4	7.0%	28	21.7%	206	16.7%
Mindanao	43	75.4%	15	11.6%	280	22.7%
Total	57	100.0%	129	100.0%	1,236	100.0%

Classification: Low-performing schools are those with at most 25% passing rate in at least 4 of the 7 years from 2010 to 2016; high-performing schools are those with at least 75% passing rate in at least 4 of the 7 years from 2010 to 2016

Source: Authors' calculations from Professional Regulation Commission (PRC) and Commission on Higher Education (CHED) data

Table 5, which shows the regional distributions of LET passing rates and total passers, suggests that Regions IX, XII, and the Autonomous Region in Muslim Mindanao (ARMM) post the lowest overall passing rates compared to the rest of the country in the elementary LET. The highest rates are from NCR and Western Visayas (Region VI). For the secondary LET, the lowest passing rates are posted by the ARMM and Regions IX and VIII, while the highest are from the Cordillera Administrative Region (CAR) and NCR. To gain a full picture of the geographical distribution of the passers vis-a-vis the shortage in supply, additional data from DepEd are needed. However, as a general indicator from raw numbers, we can see that in the entire ARMM, only 795 people passed the LET to teach in secondary school, and also a small number of 1,092 LET elementary passers in Region XIII.

This is an area that deserves further study given that TEIs in ARMM follow distinct guidelines in terms of curriculum and program requirements, as promulgated by CHED-ARMM, that are different from the policies, standards, and guidelines (PSGs) in teacher education followed by the rest of the country.

In the elementary LET, public TEIs generally perform slightly

Table 5. Regional distribution of LET passers and passing rates, 2016

Regions	LET Elementary				LET Secondary			
	First-time passing rate (%)	Repeater passing rate (%)	Total passers	Total passing rate (%)	First-time passing rate (%)	Repeater passing rate (%)	Total passers	Total passing rate (%)
Autonomous Region in Muslim Mindanao (ARMM)	18.6	10.1	1,789	11.9	34.5	7.7	795	15.7
Cordillera Administrative Region (CAR)	63.2	20.6	902	42.9	68.1	19.1	1,678	49.7
National Capital Region (NCR)	69.2	16.5	1,982	46.9	67.5	19.4	6,305	49.4
Region I (Ilocos Region)	58.3	19.9	1,864	40.1	56.2	14.8	2,169	36.8
Region II (Cagayan Valley)	57.3	18.1	1,347	35.6	56.4	18.2	2,113	38.9
Region III (Central Luzon)	57.1	17.9	3,147	36.3	55.0	16.9	4,399	36.0
Region IV-A (CALABARZON)	53.2	14.6	2,481	32.1	55.9	15.6	4,775	36.4
Region IV-B (MIMAROPA)	57.8	14.5	1,077	31.4	53.1	12.3	1,391	31.9
Region V (Bicol Region)	44.2	12.9	2,992	27.1	51.0	12.9	3,093	31.3
Region VI (Western Visayas)	63.2	20.0	2,951	45.8	61.5	17.7	2,908	43.0
Region VII (Central Visayas)	61.1	14.6	3,176	37.7	62.9	15.5	3,602	41.5
Region VIII (Eastern Visayas)	53.2	12.6	2,532	28.4	41.4	11.6	1,902	23.1
Region IX (Zamboanga Peninsula)	37.2	11.8	1,779	20.7	32.5	10.8	1,321	18.2
Region X (Northern Mindanao)	53.6	13.2	1,327	29.4	62.1	15.2	1,780	41.1
Region XI (Davao Region)	65.9	16.7	1,229	39.0	59.8	15.1	2,584	39.0
Region XIII (Soccsksargen)	42.7	11.6	1,488	22.0	52.2	12.5	2,131	29.9
Region XIII (Caraga)	50.5	13.7	1,092	27.6	50.4	12.0	643	30.4
Philippines	52.1	13.9	33,155	29.8	56.2	14.4	43,589	35.4

Source: Authors' calculations from Professional Regulation Commission (PRC) and Commission on Higher Education (CHED) data

better than private ones. In 2016, the passing rate for SUCs and LUCs were 59.3% and 46.9%, respectively, compared to 45.8% among private schools for the elementary LET. For the secondary LET, the passing rates are closer across TEI types.

Since secondary school teachers require a higher level of science and math knowledge to pass the LET, it stands to reason that those who study in HEIs with pure science programs (i.e. offer a bachelor’s degree in a field of science, and therefore have specialized faculty and laboratories for the discipline) would more likely pass the secondary LET. Figure 9 shows LET secondary mean passing rates for TEIs with a science program, contrasted with those without a science program, from 2010 to 2016. It shows that across all years, there is a significant advantage for schools with science programs. From a planning perspective, it is important then, that in addition to tracking the availability of teacher education programs which would supply the teaching force in public and private schools, the availability of science

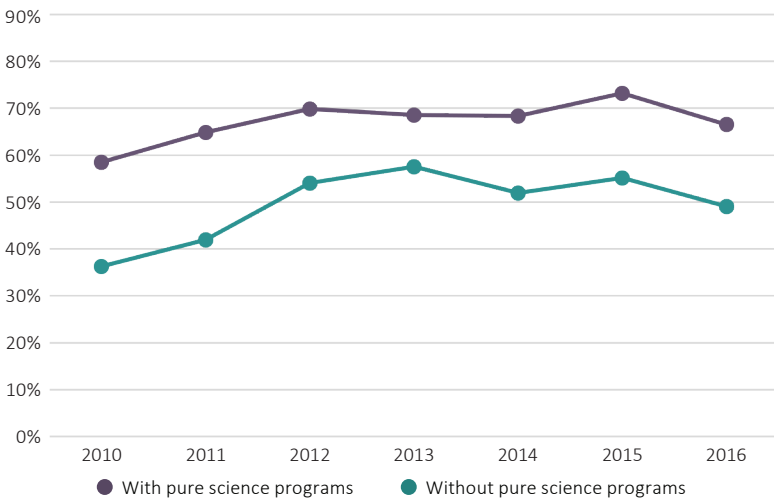


Figure 9. Secondary LET mean passing rates (%) of first-time takers, 2010–2016

Source: Authors’ calculations from Professional Regulation Commission (PRC) and Commission on Higher Education (CHED) data

and math programs should be tracked as well. If national-level goals include streaming of students toward STEM programs, efforts to retool the teaching force in high schools should include plans for upgrading instruction at the level of TEIs, focusing on institutions that offer full science undergraduate programs.

The CHED’s program to award Centers of Development and Excellence (COD and COE) statuses to programs was intended to create incentives to improve and sustain high levels of performance. COE is the first-tier level of achievement, and the COD is second-tier. Programs are reviewed on factors that are believed to be associated with better HEI outcomes, such as high-performing graduates and impactful research. Factors considered include faculty credentials, facilities and equipment or laboratories for student use, research involvement and output of faculty, as well as admissions procedures. Figure 10 shows the average passing rates of COD and COE programs versus all other schools. It shows that teacher education programs

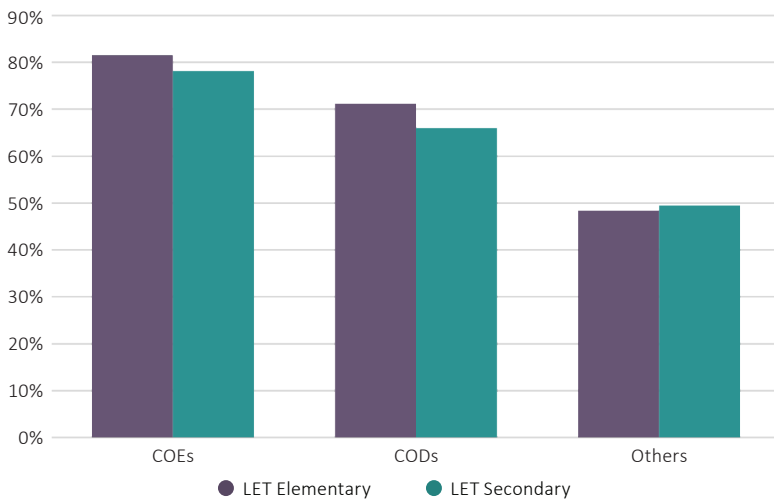


Figure 10. LET mean passing rates (%) by program classification status, 2010–2016
Source: Authors’ calculations from Professional Regulation Commission (PRC) and Commission on Higher Education (CHED) data

with COE status have almost twice the LET passing rates of other schools in both the elementary and secondary LET. Those with COD status have passing rates much lower than COE programs, and only slightly higher than those of other schools. There are only 36 out of over a thousand programs in teacher education that have COE status, and only 38 with COD status. If less than 10% of programs pass scrutiny for COD status, this means that in the context of rampant proliferation of teacher education programs, there has been weak oversight on quality.

Not all LUCs are CHED-recognized as institutions, although some of their offerings may have CHED recognition at the program level. Overall, however, as can be seen from Table 6, we see that CHED-recognized LUCs scored slightly higher than non-CHED-recognized LUCs in the elementary (around 5 points on average) and secondary (7 points) LET. As of the end of 2017, only 23 LUCs were recognized, but by 2018, this climbed to 78 because of the recent free tuition law. The law’s implementing rules compelled LUCs to seek formal recognition in order to qualify for government funding for tuition of its students. CHED recognition should be pursued either by the LUC or initiated by CHED so that all programs available in the country, especially the public ones, can be accounted for in planning and assessment.

Table 6. Mean passing rates of CHED-recognized and not CHED-recognized LUCs, 2010–2016

	Mean passing rate (%) – LET Elementary	Mean passing rate (%) – LET Secondary
CHED-recognized LUCs	58.11	60.19
Not CHED-recognized LUCs	53.65	53.71

Source: Authors’ calculations from Professional Regulation Commission (PRC) and Commission on Higher Education (CHED) data

Predictors of education program performance

An important limitation of the previous analyses is that the variables that were found to be correlated with LET passing rates could

themselves be also correlated. If that were the case, then the estimated relationship between these variables individually with LET passing rates could be overstated (or understated, depending on the nature of the correlation). Multiple regression analysis is a means of estimating the relationship of each of the same variable with LET passing rates, while at the same time, controlling for the other variables.

Table 7 shows the results, separately for the elementary and secondary LET, of regressing passing rates against the following variables: student-to-faculty ratio, island group, type of school, size of school, and the school's year of establishment. It shows a robust relationship between passing rate and each of the individual variables after controlling for the other variables through regression.

For the elementary LET, a one-unit increase in the student-to-faculty ratio, for instance, is associated with a 0.1 percentage point decline in passing rate, after controlling for the other variables. Schools in NCR, on average, have a passing rate higher by 9.3 percentage points, and those in Mindanao, on average, have a passing rate lower by 8.1 percentage points compared to schools in the Visayas. Private schools, on average, have a passing rate lower by 5.4 percentage points compared to SUCs. On average, small schools have passing rates lower by 17.8 percentage points and medium-sized schools have passing rates lower by 7.8 percentage points compared to large schools. Schools established in the 1980s, have passing rates lower by 6.4 percentage points compared to schools established before 1970, while schools established in the 1990s and in the 2000s have passing rates lower by 12.7 and 6.0 percentage points, respectively. Given that newer schools appear to perform poorer, the question is whether CHED's standards and its ability to enforce rules warrants examination. Since the creation of CHED in 1994, was it able to improve the overall quality of HEIs and their specific programs?

Results for the secondary LET are roughly similar, except that private schools and LUCs do somewhat better than SUCs, controlling

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

Table 7. Multiple regression analysis of 2016 LET Elementary and Secondary passing rates (all school types)

Dependent variable: LET passing rate	Coefficient (LET Elementary)	Coefficient (LET Secondary)
Student-to-faculty ratio	-0.1**	-0.2***
With pure science program	N/A	3.1
Island group (Base = Visayas)		
NCR	9.3***	8.4***
Luzon	-0.04	1.2
Mindanao	-8.1***	-7.8***
Type of school (Base = SUC)		
LUC	1.4	5.9**
Private	-5.4***	4.2**
Size of school (Base = Large)		
Medium	-7.8**	-3.6
Small	-17.8***	-14***
Year school was established (Base = Before 1970)		
1970s	-4.1	-0.1
1980s	-6.4***	-4.9**
1990s	-12.7***	-7.2***
2000s	-6.0***	-5.4**
Classification of school (Base = Other Schools)		
Center of Development (COD)	12.0***	7.9**
Center of Excellence (COE)	17.8***	15.4***
Constant	74.6***	63.3***
No. of obs.	767	775
F-stat	24.31	16.6
R2	0.31***	0.25***

Note: Only schools with at least 10 takers were included

*** significant at the 1% level ($p < .01$)

** significant at the 5% level ($p < .05$)

* significant at the 10% level ($p < .1$)

Source: Authors' calculations from Professional Regulation Commission (PRC) and Commission on Higher Education (CHED) data

for the other variables. In the secondary LET, a one-unit increase in the student-to-faculty ratio, for instance, is associated with a 0.2 percentage point decline in passing rate. Compared to schools in the Visayas, schools in NCR have a passing rate higher by 8.4 percentage points and those in Mindanao have a passing rate lower by 7.8 percentage points. On average, LUCs have a passing rate higher by 5.9 percentage points than SUCs, while private schools have a passing rate higher by 4.2 percentage points. Small schools have a passing rate lower by 14 percentage points than large schools. Compared to schools established before 1970, schools established in the 1980s have a passing rate lower by 4.9 percentage points, and schools established in the 1990s and the 2000s, have passing rate lower by 7.2 and 5.4 percentage points, respectively.

To summarize, the lowest-performing schools in the LET, on average, were those that are small, with high student-to-faculty ratio, located in Mindanao, and established in the 1990s.

Since examinees are not required to have completed a teacher education degree to qualify for the LET, the extent to which the passing rates serve as an indicator of quality of teacher education programs is limited.

Governance structure and the lack of a planned supply-chain system

The trifocalization of the education system in 1994 resulted in the separation of higher education regulation from the basic education supply system—that is, the creation of CHED as a separate agency from the DepEd. While there are governance mechanisms through which these two agencies, together with the Technical Education and Skills Development Authority (TESDA) for technical and vocational education, coordinate on educational policies, it is unclear whether close coordination happens specifically in relation to teacher education. Similarly, as a result of the same package of reforms recommended by the Congressional Commission on Education to

Review and Assess Philippine Education (EDCOM) in 1991,¹² the Teacher Education Council (TEC) was established through Republic Act No. 7784. Composed of officials from DepEd, CHED and PRC, the Council is mandated “to formulate policies and standards that shall strengthen and improve the system of teacher education in all existing public and private schools” (Section 7b, R.A. 7784) and “to design collaborative programs or projects that will enhance pre-service teacher training, in-service training, re-training, orientation, and teacher development,” (Section 7f, RA 7784) among others. Under this Council, regular mechanisms to ensure coherence across the policies and programs implemented by DepEd (e.g., qualifications for hiring, in-service training), CHED (e.g., pre-service teacher education, prioritization of slots based on need for teachers in specific areas, conduct of research through HEIs), and PRC (e.g., assessment of performance of examinees) could be initiated in order to forge a more holistic and single-minded approach in improving teacher quality. Despite this immense potential, institutional support and funding for the Council has remained inconsistent, thereby leaving a wide room for improvement, reflecting the uncoordinated approach in teacher education development today.

More in-depth investigations connecting data on teacher needs, the nature of shortages (e.g., which specializations and which areas), performance indicators, and HEI-based data on enrollment, graduation rates, and LET performance can provide much-needed information on the kinds of interventions needed to stabilize and improve the basic education teacher supply chain. Such studies will require the DepEd and the CHED to work closely together to answer the following questions: What have been the indicators of job performance in teaching at the elementary and secondary levels? What are the indicators of performance of HEIs in training future teachers?

¹² The Congressional Commission on Education, *Sectoral Targets and Functional Linkages*, v. 3. *Areas of Concern in Philippine Education, Book One: Making Education Work*. Quezon City: Congressional Oversight Committee on Education, 1993.

How can such information be deployed to benefit the preparation phase in HEIs, so that their graduates, which are hoped to become LET passers, are better equipped for effective teaching?

Recommendations

The demand for elementary and secondary school teachers has been growing consistently, far outpacing supply. At present, the supply of new teachers is not even enough to meet the demand from the public-school system alone. Hiring, placement, and retention of teachers under the DepEd is a highly complex issue and filling vacant positions could not be remedied solely by hiring all LET passers. In elementary schools, a teacher can be a generalist, but they have to be assigned to schools where there are vacancies, often in rural and remote communities, but not all teachers are willing or able to move for their jobs. Teachers now also have to use the children's mother tongue in the first three grade levels of elementary school, which makes it difficult to assign teachers from outside a given region. In high schools, teachers should ideally have specializations such as in teaching science, math, or English, for which they have to test for in the specialization portion of the secondary LET. The shortages in some specialization tracks may be more acute than in others, with specializations in math and science being the most difficult positions to fill in the current hiring cycle. Moreover, the local job market competes with the demand for overseas teaching positions. For all these reasons, there should be ideally many more qualified teachers entering the job market every year.

Overall passing rates for all takers of the LET are extremely low when the count includes the repeaters, only improving if we look solely at the first-time takers. The regional disparities in LET passing rates of HEIs mean that in regions with very low LET performance (e.g. ARMM, Zamboanga Peninsula), it would be difficult to hire enough good teachers to provide quality public education. Most of the teachers would have to be sourced from outside the region, which may

imperil the implementation of “mother tongue instruction” for early elementary, resulting in a disadvantage for the students.

Teacher education programs have benefits that redound to one of the most critical factors for improving human development in the Philippines: high-quality primary and secondary education. Improving HEI programs for teacher education must be aggressively pursued not only by CHED, but also by the DepEd and stakeholders representing private schools in all levels. Incentivizing high-performing teacher education schools by providing institutional grants (e.g. Centers of Excellence and Development) may not be sufficient. To increase the pool of qualified teachers, providing close support to programs in areas with almost no high-performing schools will be necessary. Targeted interventions to improve teacher education at the HEI level should be mindful of the areas where there are teacher shortages at the basic education level. For instance, in certain areas of Mindanao where there are only a few good TEIs, mentoring, exposure programs, and visiting scholar programs may help shore up program quality.

Promoting the teaching career track, particularly in high school specialization tracks where shortages may be more acute, can be done at the level of HEIs. DepEd and CHED may want to revisit the requirement of units in teacher education to qualify one for a teaching position at the senior high school level. For example, a physics undergraduate degree might be a more valuable qualification for teaching at the SHS level than a generalist undergraduate degree with master’s units in physics education. As a temporary fix for shortages, Republic Act No. 10533, Sec. 8, allows for the “hiring of graduates of science, mathematics, statistics, engineering and other specialists in subjects with a shortage of qualified applicants.” The provisions in this law likewise allows for part-time teaching in specialized subjects without passing the LET, however, it is unclear if these provisions have been invoked in recent years. These exceptions are allowed only under conditions of shortages, and it seems that the system has been operating on shortages in key subjects for many

years, in which the longer-term solution of the supply chain must be addressed. Attracting the best science, math, and engineering graduates into the teaching profession at the high school level is difficult enough and the addition of layers of certification-type requirements all the more increases this difficulty. Although there are numerous studies consistently linking the amount of subject matter knowledge gained from education coursework and teacher effectiveness, Darling-Hammond (2000) also stressed the importance of the kind and quality of in-service professional development as well as pre-service education in this relationship. That is, from a review of literature, the degree of pedagogical skill influences teaching practice and student achievement. Thus, a more suitable requirement than units in a master's degree in teacher education may be the number of mentoring and team teaching hours logged in after being hired. This would attract new talent in these difficult-to-fill specialization positions.

In 2013, Republic Act No. 10612 was passed, requiring all science and technology scholars to render return service to the country, specifically to teach full-time in high school for subjects in the sciences and allied fields (Section 10). In 2018, Republic Act No. 10931 or the Universal Access to Quality Tertiary Education Act was passed, providing free tuition and other fees for all public universities and colleges. While students of teacher education programs are mostly headed toward the teaching profession, STEM graduates can be compelled through similar return service requirements to render two years of teaching specialized courses at the secondary level. Further, through the same law, additional scholarships and incentives can be offered for those in teacher education programs to do mathematics and science specializations. HEIs can also design and adopt a program that would stream education majors toward the fields where teacher shortages are acute. Such streaming programs may work through direct and active links between large senior high schools and HEIs with teacher education programs, focusing on those HEIs that have the capacity to expand to the science and math fields. Ladia et al. (2012) say that

the highest-performing high school students choose engineering, business, science, and health science courses in college. If this is true, it implies that students taking teacher education programs are not the high performers to begin with. A supply intervention could begin with the streaming of the best SHS students into teacher education, then into a specialization in mathematics or science. Alternatively, once they complete a bachelor's degree from the other programs, the government may figure out how to get them into teaching by offering scholarships for graduate studies alongside part-time employment in the DepEd.

Ultimately, the main challenge is to get more of the best students into teacher education and into the teaching profession, in the face of budgetary allocation limits. Investments in streaming students through a series of incentive systems to attract the brightest into the teaching profession may have more lasting returns and impacts on the quality of basic education, rather than continuing to increase the salaries of teachers who are already in the system.

More broadly, the policy framework that governs the licensing process for teachers needs close review and updating. Republic Act No. 7836 was passed in 1994 and since then, millions of Filipinos have taken the LET, and a good portion of them were eventually hired by the public education system. What is the extent to which the LET has been able to professionalize the ranks and raise the quality of teaching in schools? Since 1994, there have been many large reforms instituted, including the full implementation of mandatory Kindergarten education, the senior high school system of the K to 12 Law, and going back further, the separation of the higher education system from the larger basic education governance system. Under these new conditions, do the laws and policies governing teacher professionalization still perform as intended, or are changes necessary to make them more responsive to the current institutional setup and the expected roles and responsibilities of teachers? A review of how well the efforts toward professionalization have performed over the

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

years, and how these might be improved for the current times should be done through close coordination between providers, regulators, and stakeholders in the basic and higher education sectors.



References

- Darling-Hammond, Linda. 2000. "Teacher Quality and Student Achievement: A Review of State Policy Evidence". *Education Policy Analysis Archives* 8(1): 1–44. doi:10.14507/epaa.v8n1.2000
- . 2010. "Teacher Education and the American Future." *Journal of Teacher Education* 61(1-2): 35–47. doi:10.1177/0022487109348024
- Darling-Hammond, Linda, and Robert Rothman. "Lessons Learned from Finland, Ontario, and Singapore." In *Teacher and Leader Effectiveness in High-Performing Systems*, edited by Linda Darling-Hammond and Robert Rothman, 1–11. Washington, DC: Alliance for Excellent Education and Stanford and Stanford, CA: Stanford Center for Opportunity Policy in Education, 2011.
- David, Clarissa, Jose Ramon Albert, and Sheryl Lyn Carreon-Monterola. "In pursuit of sex parity: Are girls becoming more educated than boys?" (working paper, PIDS Policy Notes No. 2009-05. Philippine Institute for Development Studies, Makati City, Philippines, 2009). <http://dirp3.pids.gov.ph/ris/pn/pidspno905.pdf>.
- Hanushek, Eric A., and Steven G. Rivkin. "Teacher Quality." In Vol. 2 of *Handbook of the Economics of Education*, edited by Eric A. Hanushek and Finis Welch, 1051–78, 2006. [https://doi.org/10.1016/S1574-0692\(06\)02018-6](https://doi.org/10.1016/S1574-0692(06)02018-6).
- Hanushek, Erik A., John F. Kain, Daniel M. O'Brien, and Steven G. Rivkin, "The market for teacher quality" (Working Paper 11154. National Bureau of Economic Research, Cambridge, MA, February 2005). <https://doi.org/10.3386/w11154>.
- Holmlund, Helena, and Krister Sund. 2008. "Is the gender gap in school performance affected by the sex of the teacher?" *Labour Economics* 15(1): 37–53. doi:10.1016/j.labeco.2006.12.002

- Ladia, Maria Agnes P., Remedios D. Facun, Rosalina C. Garcia, and Nelvin R. Nool. "Centers of Excellence and Centers of Development for Teacher Education: Their Contribution to the Elementary Teacher Force." (working paper, College of Education, Tarlac State University, Tarlac City, Philippines, 2012). <http://www.ipedr.com/vol30/64-ICEMI%202012-M10066.pdf>
- Mehta, Jal. 2013. "From Bureaucracy to Profession: Remaking the Educational Sector for the Twenty-First Century." *Harvard Educational Review* 83(3): 463–88. doi:10.17763/haer.83.3.kro8797621362v05
- Paredes, Valentina. 2014. "A teacher like me or a student like me? Role model versus teacher bias effect." *Economics of Education Review* 39(C): 38–49. doi:10.1016/j.econedurev.2013.12.001
- Sansone, Dario. 2017. "Why does teacher gender matter?." *Economics of Education Review* 61(C): 9–17. doi:10.1016/j.econedurev.2017.09.004
- Winters, Marcus A., Robert C. Haight, Thomas T. Swaim, and Katarzyna A. Pickering. 2013. "The effect of same-gender teacher assignment on student achievement in the elementary and secondary grades: Evidence from panel data." *Economics of Education Review* 34: 69–75. doi:10.1016/j.econedurev.2013.01.007

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

Appendix

Table 1. Low-performing schools, LET Elementary 2016

#	School	Region	Type	Size	Year established
1	Abubakar Computer Learning Center Foundation	ARMM	Pri	small	1990s
2	Adiong Memorial Polytechnic State College	ARMM	SUC	medium	1990s
3	Bubong Marzok Memorial Foundation College	ARMM	Pri	small	2000s
4	Cali Paramedical College Foundation	ARMM	Pri	small	2000s
5	Central Sulu College	ARMM	Pri	small	Before 1970s
6	Dansalan Polytechnic College	ARMM	Pri	small	1990s
7	Datu Ibrahim Paglas Memorial College	ARMM	Pri	small	2000s
8	Datu Mala Muslim Mindanao Islamic College Foundation	ARMM	Pri	small	1990s
9	Jamiatu Marawi Al-Islamia Foundation	ARMM	Pri	small	1990s
10	Jamiatu Muslim Mindanao	ARMM	Pri	small	1980s
11	Jamiatul Philippine Al-Islamia	ARMM	Pri	small	Before 1970s
12	Lake Lanao College	ARMM	Pri	small	2000s
13	Lanao Educational Institute	ARMM	Pri	small	1980s
14	Lanao Islamic Paramedical College Foundation	ARMM	Pri	small	2000s
15	Lapak Agricultural School	ARMM	SUC	small	Before 1970s
16	Mapandi Memorial College	ARMM	Pri	small	1970s
17	Marawi Capitol College Foundation	ARMM	Pri	small	1990s
18	Marawi Islamic College	ARMM	Pri	small	2000s
19	Mindanao Islamic Computer College	ARMM	Pri	small	1990s
20	Mindanao State University – Lanao National College of Arts and Trades	ARMM	SUC	small	1970s
21	Pacasum College	ARMM	Pri	small	Before 1970s
22	Parang Foundation College	ARMM	Pri	small	1980s
23	South Upi College	ARMM	Pri	large	2000s
24	Southwestern Mindanao Islamic Institute	ARMM	Pri	small	1990s

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

#	School	Region	Type	Size	Year established
25	SPA College	ARMM	Pri	medium	2000s
26	Sulu State College	ARMM	SUC	medium	1980s
27	Tawi-Tawi Regional Agricultural College	ARMM	SUC	medium	Before 1970s
28	Regis Marie College	NCR	Pri	small	1990s
29	Luna Colleges	I	Pri	small	Before 1970s
30	Lyceum Northwestern University – Urdaneta Campus	I	Pri	small	2000s
31	HMIJ Foundation Philippine Islamic College	IX	Pri	small	1990s
32	Josefina H. Cerilles State College – San Pablo	IX	SUC	small	2000s
33	Pagadian Capitol College	IX	Pri	small	1990s
34	Western Mindanao Foundation College	IX	Pri	small	2000s
35	Ovilla Technical College	V	Pri	small	Before 1970s
36	Southern Masbate Roosevelt College	V	Pri	small	Before 1970s
37	Colegio De Las Navas	VIII	LUC	small	2000s
38	Our Lady of Mercy College	VIII	Pri	small	1990s
39	Southern Capital Colleges	X	Pri	small	Before 1970s
40	North Davao College – Tagum Foundation	XI	Pri	small	1980s
41	Antonio R. Pacheco College	XII	Pri	small	1990s
42	Cotabato City State Polytechnic College	XII	SUC	large	1980s
43	De La Vida College	XII	Pri	small	1990s
44	Headstart College of Cotabato	XII	Pri	small	1990s
45	Mindanao Capitol College	XII	Pri	small	1990s
46	Quezon Colleges of Southern Philippines	XII	Pri	small	Before 1970s
47	Senator Ninoy Aquino College Foundation	XII	Pri	small	1990s

Note: Low-performing schools are those with at most 25% passing rate in at least 4 of the 7 years from 2010 to 2016.

Source: Authors' calculations from Professional Regulation Commission (PRC) and Commission on Higher Education (CHED) data

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

Table 2. High-performing schools, LET Elementary 2016

#	School	Region	Type	Size	Year established
1	Benguet State University – Main	CAR	SUC	medium	Before 1970s
2	Easter College	CAR	Pri	small	
3	Ifugao State University – Main	CAR	SUC	medium	Before 1970s
4	Kings Colleges of the Philippines – Benguet	CAR	Pri	medium	2000s
5	Saint Louis University	CAR	Pri	large	Before 1970s
6	University of Baguio	CAR	Pri	large	Before 1970s
7	University of the Cordilleras	CAR	Pri	large	Before 1970s
8	Adamson University	NCR	Pri	large	Before 1970s
9	Assumption College	NCR	Pri	small	Before 1970s
10	Centro Escolar University – Manila	NCR	Pri	large	Before 1970s
11	De La Salle University – Manila	NCR	Pri	large	Before 1970s
12	Emilio Aguinaldo College	NCR	Pri	medium	1970s
13	Far Eastern University	NCR	Pri	large	Before 1970s
14	Febias College of Bible	NCR	Pri	small	Before 1970s
15	Golden Link College Foundation	NCR	Pri	small	2000s
16	La Consolacion College – Caloocan	NCR	Pri	small	Before 1970s
17	Miriam College	NCR	Pri	medium	Before 1970s
18	New Era University	NCR	Pri	large	1970s
19	Our Lady of Fatima University – Quezon City	NCR	Pri	medium	1990s
20	Pamantasan ng Lungsod ng Pasig	NCR	LUC	medium	
21	Philippine Normal University – Main	NCR	SUC	medium	Before 1970s

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

#	School	Region	Type	Size	Year established
22	Polytechnic University of the Philippines	NCR	SUC	large	Before 1970s
23	Saint Pedro Poveda College	NCR	Pri	small	Before 1970s
24	Southville International School and Colleges	NCR	Pri	small	2000s
25	St. Paul University – Manila	NCR	Pri	small	Before 1970s
26	St. Scholastica's College	NCR	Pri	small	Before 1970s
27	The National Teachers College	NCR	Pri	medium	Before 1970s
28	The Philippine Women's University – Manila	NCR	Pri	medium	Before 1970s
29	The Philippine Women's University – Quezon City	NCR	Pri	small	Before 1970s
30	University of Asia and the Pacific	NCR	Pri	medium	Before 1970s
31	University of Caloocan City	NCR	LUC	large	1970s
32	University of Santo Tomas	NCR	Pri	large	Before 1970s
33	University of the East – Manila	NCR	Pri	large	Before 1970s
34	University of the Philippines – Diliman	NCR	SUC	large	Before 1970s
35	Bacolod City College	NIR	LUC	medium	1990s
36	Colegio De Sta. Catalina De Alejandria	NIR	Pri	small	Before 1970s
37	Negros Oriental State University – Main Campus	NIR	SUC	large	Before 1970s
38	Philippine Normal University – Cadiz	NIR	SUC	small	Before 1970s
39	Silliman University	NIR	Pri	medium	Before 1970s
40	St. Paul University Dumaguete	NIR	Pri	small	Before 1970s
41	University of Negros Occidental – Recoletos	NIR	Pri	medium	Before 1970s
42	University of Saint La Salle	NIR	Pri	medium	Before 1970s

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

#	School	Region	Type	Size	Year established
43	Mariano Marcos State University – College of Teacher Education – Laoag City	I	SUC	small	Before 1970s
44	North Luzon Philippines State College	I	SUC	medium	Before 1970s
45	Pangasinan State University – Bayambang	I	SUC	medium	1970s
46	Pangasinan State University – Urdaneta City	I	SUC	medium	1970s
47	Saint Louis College – City of San Fernando	I	Pri	medium	Before 1970s
48	Saint Paul College of Ilocos Sur	I	Pri	small	Before 1970s
49	University of Northern Philippines	I	SUC	large	Before 1970s
50	University of Pangasinan	I	Pri	large	Before 1970s
51	Batanes State College	II	SUC	small	
52	Nueva Vizcaya State University – Main, Bayombong	II	SUC	medium	
53	Philippine Normal University – Alicia	II	SUC	small	
54	Saint Mary's University of Bayombong	II	Pri	medium	Before 1970s
55	University of Perpetual Help System	II	Pri	small	1970s
56	Angeles University Foundation	III	Pri	medium	Before 1970s
57	Aurora State College of Technology	III	SUC	small	1990s
58	College of the Holy Spirit of Tarlac	III	Pri	small	Before 1970s
59	First City Providential College	III	Pri	small	2000s
60	Holy Angel University	III	Pri	large	Before 1970s
61	Manuel V. Gallego Foundation Colleges	III	Pri	small	Before 1970s
62	Mount Carmel College – Baler	III	Pri	small	Before 1970s
63	Sienna College of San Jose	III	Pri	small	1990s
64	Tarlac College of Agriculture	III	SUC	medium	Before 1970s

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

#	School	Region	Type	Size	Year established
65	Baptist Voice Bible College	IV-A	Pri	small	2000s
66	Calayan Educational Foundation	IV-A	Pri	small	1970s
67	Canossa College	IV-A	Pri	small	Before 1970s
68	City College of Calamba	IV-A	LUC	small	2000s
69	De La Salle – Lipa	IV-A	Pri	medium	Before 1970s
70	De La Salle University – Dasmariñas	IV-A	Pri	large	1980s
71	Emilio Aguinaldo Educational Corporation – Emilio Aguinaldo College	IV-A	Pri	medium	1990s
72	Philippine Normal University – Lopez	IV-A	SUC	small	
73	Polytechnic University of the Philippines – Mulanay	IV-A	SUC	small	1990s
74	Southern Luzon State University	IV-A	SUC	large	Before 1970s
75	St. Bridget College	IV-A	Pri	small	Before 1970s
76	University of Perpetual Help System Dalta – Calamba	IV-A	Pri	medium	1990s
77	University of Perpetual Help System – Laguna	IV-A	Pri	medium	1970s
78	Palawan State University	IV-B	SUC	large	1970s
79	Palawan State University – Narra	IV-B	SUC	small	2000s
80	Ateneo de Zamboanga University	IX	Pri	medium	Before 1970s
81	Ateneo de Naga University	V	Pri	medium	Before 1970s
82	Bicol University Gubat Campus	V	SUC	small	Before 1970s
83	Bicol University – Daraga Campus	V	SUC	medium	Before 1970s
84	Bicol University – Polangui Campus	V	SUC	medium	Before 1970s
85	Catanduanes State University – Main	V	SUC	medium	1970s
86	Universidad de Sta. Isabel	V	Pri	medium	Before 1970s
87	Central Philippine University	VI	Pri	large	Before 1970s

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

#	School	Region	Type	Size	Year established
88	Guimaras State College – Main	VI	SUC	medium	Before 1970s
89	Northern Iloilo Polytechnic State College – Lemery Campus	VI	SUC	small	Before 1970s
90	St. Paul University of Iloilo	VI	Pri	small	Before 1970s
91	University of San Agustin	VI	Pri	medium	Before 1970s
92	West Visayas State University – Main	VI	SUC	medium	Before 1970s
93	Western Visayas College of Science and Technology – Miagao Campus	VI	SUC	medium	
94	Bohol Island State University – Bilar	VII	SUC	medium	Before 1970s
95	Bohol Island State University – Calape Polytechnic College	VII	SUC	small	1980s
96	Bohol Island State University – Candijay	VII	SUC	medium	Before 1970s
97	Bohol Island State University – Clarin	VII	SUC	medium	Before 1970s
98	Bohol Island State University – Tagbilaran	VII	SUC	medium	Before 1970s
99	Bohol Wisdom School	VII	Pri	small	2000s
100	Buenavista Community College	VII	LUC	small	2000s
101	Cebu Normal University	VII	SUC	medium	Before 1970s
102	Cebu Technological University – Argao	VII	SUC	medium	Before 1970s
103	Cebu Technological University – Danao City	VII	SUC	medium	1980s
104	De La Salle Andres Soriano Memorial College	VII	Pri	small	Before 1970s
105	Holy Name University	VII	Pri	medium	Before 1970s
106	Saint Theresa's College of Cebu	VII	Pri	small	Before 1970s
107	University of Cebu – Lapulapu and Mandaue	VII	Pri	large	1990s
108	University of San Carlos	VII	Pri	large	Before 1970s

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

#	School	Region	Type	Size	Year established
109	Bato Institute of Science and Technology	VIII	Pri	small	1990s
110	Saint Joseph College	VIII	Pri	medium	Before 1970s
111	The College of Maasin	VIII	Pri	small	Before 1970s
112	Cagayan De Oro College	X	Pri	large	Before 1970s
113	La Salle University	X	Pri	medium	Before 1970s
114	Lourdes College	X	Pri	small	Before 1970s
115	Mindanao State University – Iligan Institute of Technology	X	SUC	large	Before 1970s
116	Mindanao State University – Iligan Institute of Technology – Maigo School of Arts and Trades	X	SUC	small	Before 1970s
117	Northern Bukidnon Community College	X	LUC	small	2000s
118	St. Michael's College	X	Pri	medium	Before 1970s
119	Tagoloan Community College	X	LUC	medium	2000s
120	Xavier University	X	Pri	medium	Before 1970s
121	Arriegado College Foundation	XI	Pri	small	1980s
122	Ateneo de Davao University	XI	Pri	large	Before 1970s
123	Cor Jesu College	XI	Pri	medium	Before 1970s
124	Holy Cross College of Calinan	XI	Pri	small	Before 1970s
125	Holy Cross of Davao College	XI	Pri	large	Before 1970s
126	Saint Mary's College of Tagum	XI	Pri	small	Before 1970s
127	Saint Peter's College of Toril	XI	Pri	small	Before 1970s
128	UM Guianga College	XI	Pri	small	Before 1970s
129	UM Tagum College	XI	Pri	large	Before 1970s

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

#	School	Region	Type	Size	Year established
130	University of Mindanao	XI	Pri	large	Before 1970s
131	University of Southeastern Philippines – College of Agriculture – Tagum	XI	SUC	medium	1970s
132	University of Southeastern Philippines – Main	XI	SUC	large	1970s
133	Brokenshire College SOCKSARGEN	XII	Pri	small	2000s
134	Notre Dame of Dadiangas University	XII	Pri	medium	Before 1970s
135	Notre Dame of Marbel University	XII	Pri	medium	Before 1970s
136	St. Alexius College	XII	Pri	small	1970s
137	Caraga State University – Main Campus	XIII	SUC	medium	Before 1970s
138	De La Salle John Bosco College	XIII	Pri	small	Before 1970s
139	Father Saturnino Urios University	XIII	Pri	medium	Before 1970s
140	Philippine Normal University – Mindanao Campus	XIII	SUC	small	Before 1970s

Note: *High-performing schools are those with at least 75% passing rate in at least 4 of the 7 years from 2010 to 2016.*

Source: Authors' calculations from Professional Regulation Commission (PRC) and Commission on Higher Education (CHED) data

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

Table 3. Low-performing schools, LET Secondary 2016

#	School	Region	Type	Size	Year established
1	Malasiqui Agno Valley College	I	Pri	small	Before 1970s
2	Luna Colleges	I	Pri	small	Before 1970s
3	Isabela State University – San Mateo Campus	II	SUC	small	
4	Camiling Colleges	III	Pri	small	Before 1970s
5	World Citi Colleges, Guimba Campus	III	Pri	small	After 2000s
6	Mount Carmel College of Casiguran	III	Pri	small	After 2000s
7	Palawan State University – Coron	IV-B	SUC	small	1990s
8	Romblon State University – Sta. Maria Campus	IV-B	SUC	small	1980s
9	Agoncillo College	IV-A	Pri	small	After 2000s
10	Catanduanes State University – Panganiban	V	SUC	small	Before 1970s
11	Southern Negros College	NIR	Pri	small	Before 1970s
12	Libacao College of Science and Technology	VI	LUC	small	After 2000s
13	Samar State University – Mercedes Campus	VIII	SUC	small	After 2000s
14	East Pacific Computer College	VIII	Pri	small	1990s
15	Southern City Colleges	IX	Pri	small	Before 1970s
16	Western Mindanao State University – Alicia	IX	SUC	small	
17	Western Mindanao State University – Imelda	IX	SUC	small	
18	Zamboanga Del Sur Maritime Institute of Technology	IX	Pri	small	1990s
19	St. Jude Thaddeus Institute of Technology	XIII	Pri	small	1970s
20	Agro-Industrial Foundation College of the Philippines – Davao	XI	Pri	small	1970s
21	Serapion C. Basalo Memorial Foundation College	XI	Pri	small	Before 1970s
22	Santa Cruz Mission School	XII	Pri	small	1980s

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

#	School	Region	Type	Size	Year established
23	Cotabato City State Polytechnic College	XII	SUC	large	1980s
24	De La Vida College	XII	Pri	small	1990s
25	Jamiatu Marawi Al-Islamia Foundation	ARMM	Pri	small	1990s
26	Jamiatu Muslim Mindanao	ARMM	Pri	small	1980s
27	Jamiatul Philippine Al-Islamia	ARMM	Pri	small	Before 1970s
28	Mindanao State University – Lanao National College of Arts and Trades	ARMM	SUC	small	1970s
29	Mapandi Memorial College	ARMM	Pri	small	1970s
30	Marawi Capitol College Foundation	ARMM	Pri	small	1990s
31	Mindanao Capitol College	XII	Pri	small	1990s
32	Pacasum College	ARMM	Pri	small	Before 1970s
33	St. Benedict College of Cotabato	XII	Pri	small	1990s
34	St. Luke's Institute	XII	Pri	small	1990s
35	Senator Ninoy Aquino College Foundation	XII	Pri	small	1990s
36	Mindanao Islamic Computer College	ARMM	Pri	small	1990s
37	STI College – Cotabato	XII	Pri	medium	1990s
38	Datu Mala Muslim Mindanao Islamic College Foundation	ARMM	Pri	small	1990s
39	Bubong Marzok Memorial Foundation College	ARMM	Pri	small	After 2000s
40	Hadji Butu School of Arts and Trades	ARMM	SUC	small	Before 1970s
41	Mindanao State University-Sulu Development Technical College	ARMM	SUC	medium	
42	Mindanao State University – Tawi-Tawi College of Technology and Oceanography	ARMM	SUC	medium	1980s
43	Sultan Kudarat Islamic Academy Foundation College	ARMM	Pri	small	1990s
44	Tawi-Tawi Regional Agricultural College	ARMM	SUC	medium	Before 1970s
45	Unda Memorial National Agricultural School	ARMM	SUC	small	
46	Adiong Memorial Polytechnic State College	ARMM	SUC	medium	1990s

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

#	School	Region	Type	Size	Year established
47	Balabagan Trade School	ARMM	SUC	small	Before 1970s
48	Southwestern Mindanao Islamic Institute	ARMM	Pri	small	1990s
49	Abubakar Computer Learning Center Foundation	ARMM	Pri	small	1990s
50	Lanao Educational Institute	ARMM	Pri	small	1980s
51	Mahardika Institute of Technology	ARMM	Pri	medium	1990s
52	SAL Foundation College	ARMM	Pri	small	After 2000s
53	Cali Paramedical College Foundation	ARMM	Pri	small	After 2000s
54	Marawi Islamic College	ARMM	Pri	small	After 2000s
55	South Upi College	ARMM	Pri	large	After 2000s
56	Lake Lanao College	ARMM	Pri	small	After 2000s
57	Southway College of Technology	XIII	Pri	small	1990s

Note: *Low-performing schools are those with at most 25% passing rate in at least 4 of the 7 years from 2010 to 2016.*

Source: Authors' calculations from Professional Regulation Commission (PRC) and Commission on Higher Education (CHED) data

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

Table 4. High-performing schools, LET Secondary 2016

#	School	Region	Type	Size	Year established
1	Mariano Marcos State University – Main	I	SUC	medium	Before 1970s
2	Mary Help of Christians College Seminary	I	Pri	small	1980s
3	Mariano Marcos State University – College of Teacher Education – Laoag City	I	SUC	small	Before 1970s
4	Pangasinan State University – Urdaneta City	I	SUC	medium	1970s
5	Saint Paul College of Ilocos Sur	I	Pri	small	Before 1970s
6	Philippine Normal University – Alicia	II	SUC	small	
7	Saint Mary's University of Bayombong	II	Pri	medium	Before 1970s
8	Cagayan Valley Computer and Information Technology College	II	Pri	small	1990s
9	Angeles University Foundation	III	Pri	medium	Before 1970s
10	Central Luzon Doctors' Hospital Educational Institution	III	Pri	small	1970s
11	College of the Holy Spirit of Tarlac	III	Pri	small	Before 1970s
12	Immaculate Conception Major Seminary	III	Pri	small	1980s
13	Maria Assumpta Seminary	III	Pri	small	Before 1970s
14	Mother of Good Counsel Seminary	III	Pri	small	Before 1970s
15	Our Lady of Peace College Seminary	III	Pri	small	1980s
16	Asia Pacific College of Advanced Studies	III	Pri	small	1990s
17	First City Providential College	III	Pri	small	After 2000s
18	Colegio de San Juan de Letran	III	Pri	small	After 2000s
19	De La Salle – Lipa	IV-A	Pri	medium	Before 1970s
20	Divine Word Seminary	IV-A	Pri	small	Before 1970s
21	De La Salle University – Dasmariñas	IV-A	Pri	large	1980s
22	De La Salle Health Sciences Institute	IV-A	Pri	medium	1970s

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

#	School	Region	Type	Size	Year established
23	Saint Augustine Seminary	IV-B	Pri	small	Before 1970s
24	St. Bridget College	IV-A	Pri	small	Before 1970s
25	St. Francis de Sales Major Seminary	IV-A	Pri	small	Before 1970s
26	St. Peter's College Seminary	IV-A	Pri	small	1980s
27	Southern Luzon State University	IV-A	SUC	large	Before 1970s
28	University of the Philippines – Los Baños	IV-A	SUC	large	
29	Saints John and Paul Educational Foundation	IV-A	Pri	small	1990s
30	AMA Computer College – Biñan	IV-A	Pri	small	1990s
31	La Salle College Antipolo Foundation	IV-A	Pri	small	1980s
32	First Asia Institute of Technology and Humanities	IV-A	Pri	medium	After 2000s
33	Calamba Doctors' College	IV-A	Pri	small	After 2000s
34	City College of Calamba	IV-A	LUC	small	After 2000s
35	Ateneo de Naga University	V	Pri	medium	Before 1970s
36	Bicol University – Tabaco Campus	V	SUC	small	Before 1970s
37	Holy Rosary Minor Seminary	V	Pri	small	Before 1970s
38	Central Philippine University	VI	Pri	large	Before 1970s
39	Philippine Normal University – Cadiz	NIR	SUC	small	Before 1970s
40	St. Anthony College of Roxas City	VI	Pri	small	Before 1970s
41	St. Paul University of Iloilo	VI	Pri	small	Before 1970s
42	St. Vincent Ferrer Seminary	VI	Pri	small	
43	Technological University of the Philippines – Visayas	NIR	SUC	medium	1970s
44	University of Saint La Salle	NIR	Pri	medium	Before 1970s

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

#	School	Region	Type	Size	Year established
45	University of the Philippines – Visayas	VI	SUC	medium	Before 1970s
46	West Visayas State University – Main	VI	SUC	medium	Before 1970s
47	Bacolod City College	NIR	LUC	medium	1990s
48	Bohol Island State University – Tagbilaran	VII	SUC	medium	Before 1970s
49	Cebu Doctor's University	VII	Pri	medium	1970s
50	Cebu Normal University	VII	SUC	medium	Before 1970s
51	Cebu Technological University – Argao	VII	SUC	medium	Before 1970s
52	Holy Name University	VII	Pri	medium	Before 1970s
53	Mater Dei College – Bohol	VII	Pri	small	1980s
54	Saint Theresa's College of Cebu	VII	Pri	small	Before 1970s
55	San Carlos Seminary College	VII	Pri	small	Before 1970s
56	Silliman University	NIR	Pri	medium	Before 1970s
57	University of San Carlos	VII	Pri	large	Before 1970s
58	Velez College	VII	Pri	medium	Before 1970s
59	University of Cebu – Lapulapu and Mandaue	VII	Pri	large	1990s
60	Bohol Wisdom School	VII	Pri	small	After 2000s
61	Cordova Public College	VII	LUC	small	After 2000s
62	Doña Remedios Trinidad-Romualdez Medical Foundation	VIII	Pri	small	1980s
63	Sacred Heart Seminary	VIII	Pri	small	Before 1970s
64	University of the Philippines in the Visayas Tacloban College	VIII	SUC	small	1970s
65	Saint Scholastica's College – Tacloban	VIII	Pri	small	After 2000s
66	Ateneo de Zamboanga University	IX	Pri	medium	Before 1970s

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

#	School	Region	Type	Size	Year established
67	Philippine Normal University – Mindanao Campus	XIII	SUC	small	Before 1970s
68	Xavier University	X	Pri	medium	Before 1970s
69	Northern Bukidnon Community College	X	LUC	small	After 2000s
70	Ateneo de Davao University	XI	Pri	large	Before 1970s
71	Davao del Norte State College	XI	SUC	small	1990s
72	Notre Dame of Marbel University	XII	Pri	medium	Before 1970s
73	Saint Francis Xavier College Seminary	XI	Pri	small	Before 1970s
74	San Pedro College	XI	Pri	medium	Before 1970s
75	University of Southeastern Philippines – Main	XI	SUC	large	1970s
76	University of Southeastern Philippines – College of Agriculture – Tagum	XI	SUC	medium	1970s
77	University of the Philippines – Mindanao	XI	SUC	small	1990s
78	Mindanao Kokosai Daigaku	XI	Pri	small	After 2000s
79	Mindanao State University – Iligan Institute of Technology	X	SUC	large	Before 1970s
80	Asia Pacific College	NCR	Pri	medium	1990s
81	Asian Institute for Distance Education	NCR	Pri	small	1980s
82	Assumption College	NCR	Pri	small	Before 1970s
83	Ateneo de Manila University – Quezon City	NCR	Pri	large	Before 1970s
84	University of Asia and the Pacific	NCR	Pri	medium	Before 1970s
85	Chinese General Hospital Colleges	NCR	Pri	small	Before 1970s
86	Colegio de San Juan de Letran	NCR	Pri	medium	Before 1970s
87	College of the Holy Spirit of Manila	NCR	Pri	small	Before 1970s

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

#	School	Region	Type	Size	Year established
88	De La Salle University – Manila	NCR	Pri	large	Before 1970s
89	Divine Word Mission Seminary	NCR	Pri	small	Before 1970s
90	Febias College of Bible	NCR	Pri	small	Before 1970s
91	FEU–Dr. Nicanor Reyes Medical Foundation	NCR	Pri	medium	1970s
92	Manila Tytana Colleges	NCR	Pri	small	1970s
93	Mapua Institute of Technology – Manila	NCR	Pri	large	Before 1970s
94	Metropolitan Medical Center College of Arts, Science and Technology	NCR	Pri	small	1970s
95	Miriam College	NCR	Pri	medium	Before 1970s
96	Pamantasan ng Lungsod ng Maynila	NCR	LUC	medium	Before 1970s
97	Philippine Normal University – Main	NCR	SUC	medium	Before 1970s
98	Polytechnic University of the Philippines – Sta. Rosa	IV-A	SUC	medium	
99	Polytechnic University of the Philippines – Taguig	NCR	SUC	medium	1990s
100	St. Camillus College Seminary	NCR	Pri	small	1980s
101	St. Joseph's College of Quezon City	NCR	Pri	small	Before 1970s
102	St. Paul University – Manila	NCR	Pri	small	Before 1970s
103	St. Paul University – Quezon City	NCR	Pri	small	Before 1970s
104	St. Scholastica's College	NCR	Pri	small	Before 1970s
105	San Beda College	NCR	Pri	medium	Before 1970s
106	San Carlos Seminary	NCR	Pri	small	Before 1970s
107	San Juan de Dios Educational Foundation	NCR	Pri	small	Before 1970s
108	University of the East – Ramon Magsaysay Memorial Medical Center	NCR	Pri	medium	Before 1970s

PROGRAM ON HIGHER EDUCATION RESEARCH AND POLICY REFORM

#	School	Region	Type	Size	Year established
109	University of Santo Tomas	NCR	Pri	large	Before 1970s
110	University of the Philippines – Diliman	NCR	SUC	large	Before 1970s
111	University of the Philippines – Diliman (Pampanga)	III	SUC		
112	University of the Philippines – Manila	NCR	SUC	medium	1970s
113	FEU–East Asia College	NCR	Pri	medium	1990s
114	Our Lady of Perpetual Succor College	NCR	Pri	small	1970s
115	San Beda College – Alabang	NCR	Pri	medium	1970s
116	Loral Douglas Woosley Bethany Colleges	NCR	Pri	small	1990s
117	Global City Innovative College	NCR	Pri	small	After 2000s
118	Southville International School and Colleges	NCR	Pri	small	After 2000s
119	Pamantasan ng Lungsod ng Valenzuela	NCR	LUC	medium	After 2000s
120	Saint Pedro Poveda College	NCR	Pri	small	Before 1970s
121	Pamantasan ng Lungsod ng Marikina	NCR	LUC	medium	
122	Golden Link College Foundation	NCR	Pri	small	After 2000s
123	University of the Cordilleras	CAR	Pri	large	Before 1970s
124	Benguet State University – Main	CAR	SUC	medium	Before 1970s
125	Saint Louis University	CAR	Pri	large	Before 1970s
126	San Pablo Major Seminary	CAR	Pri	small	1970s
127	University of Baguio	CAR	Pri	large	Before 1970s
128	University of the Philippines – Baguio	CAR	SUC	medium	Before 1970s
129	Saint Michael College of Caraga	XIII	Pri	small	Before 1970s

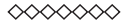
Note: High-performing schools are those with at least 75% passing rate in at least 4 of the 7 years from 2010 to 2016.

Source: Authors' calculations from Professional Regulation Commission (PRC) and Commission on Higher Education (CHED) data

EDITORIAL RESPONSIBILITIES

The Editor and the Program Editors ensure that the discussion papers contain research findings on issues that are aligned with the core agenda of the programs under the UP Center for Integrative and Development Studies.

The responsibility of the Editor and the Program Editors is towards high standards of scholarship; the generation of new knowledge that can be utilized for the good of the public; and the dissemination of such information.



EDITOR-IN-CHIEF

Teresa S. Encarnacion Tadem, Ph.D.

PROGRAM EDITORS

ON EDUCATION AND CAPACITY BUILDING

Education Research

Dina S. Ocampo, Ph.D.

*Higher Education Research and
Policy Reform*

Clarissa C. David, Ph.D.

Data Science for Public Policy

Fidel R. Nemenzo, D.Sc.

ON DEVELOPMENT

Alternative Development

Eduardo C. Tadem, Ph.D.

Karl Arvin F. Hapal

*Escaping the Middle Income Trap:
Chains for Change*

Emmanuel S. de Dios, Ph.D.

Annette O. Pelkmans-Balaoing, Ph.D.

ON SOCIAL SCIENCES

Islamic Studies

Macrina A. Morados

Nassef Manabilang Adiong, Ph.D.

Jamel R. Cayamodin, Ph.D.

Social and Political Change

Maria Ela L. Atienza, Ph.D.

Jorge V. Tigno, DPA

Strategic Studies

Herman Joseph S. Kraft

Aries A. Arugay, Ph.D.

LOCAL-REGIONAL STUDIES NETWORK

Cordillera Studies Center, UP Baguio

Leah Enkiwe-Abayao, Ph.D.

Central Visayas Studies Center, UP Cebu

Belinda F. Espiritu, Ph.D.

Ace Vincent Molo
Editorial Associate

The **UP CIDS Discussion Paper Series** is published quarterly by the
University of the Philippines Center for Integrative and Development Studies
through its **Publications Unit**.

Editorial Office: Lower Ground Floor, Ang Bahay ng Alumni, Magsaysay Avenue,
University of the Philippines, Diliman, Quezon City 1101

Telephone: 981-8500 loc. 4266 to 68 / 435-9283 • **Telefax:** 426-0955

Email: cids@up.edu.ph / cidspublications@up.edu.ph

ABOUT THE PROGRAM

The **Program on Higher Education Research and Policy Reform** aims to chart a research agenda, systematically build an evidence base for policy analysis, and create a network of experts and researchers doing work in higher education research in the Philippines.

The Program also serves as a convening body seeking to build partnerships and working collaborative networks among stakeholders.

In pursuit of these objectives, the Program seeks to gather experts who will collectively map out a short and medium-term research agenda on the needs of the Philippine tertiary education sector.

ABOUT UP CIDS

Established in 1985 by UP President Edgardo Angara, the **UP Center for Integrative and Development Studies (UP CIDS)** is a policy research unit of the University that connects disciplines and scholars across the several units of the UP System. It is mandated to encourage collaborative and rigorous research addressing issues of national significance by supporting scholars and securing funding, enabling them to produce outputs and recommendations for public policy.