

## International large-scale assessment (ILSA): Implications for pre-service teacher education in the Philippines

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The participation of countries in various international large-scale assessments (ILSA) is motivated by different factors. In recent years however, there has been a growing popularity and importance placed on the results of ILSA. Recognising the significance of ILSA as a valuable source of feedback for enhancing the basic education system, the Philippines, through its Department of Education, has actively engaged in participating. This discussion paper examines the current state of the Philippines in relation to ILSA and underscores the need to incorporate the findings of ILSA into the review of the pre-service teacher education program. Although there is limited literature available on how ILSA should inform Philippine pre-service teacher education, existing studies suggest that the current teacher education curriculum falls short in terms of meeting the expectations of ILSA. By framing the discussion within the context of the value of ILSA as an assessment system that can provide feedback for educational improvement, it becomes evident that considering ILSA in the program design of pre-service teacher education is a recognition of its significance, despite its Western origins.

### Introduction

Studies on international large-scale assessments (ILSA) have become increasingly popular in the past decade, leading to much debate among academics and the general public (ILSA Gateway, n.d.). While ILSA is considered an important tool for studying education systems and for formulating evidence-based policies, some researchers argue that “the use of international assessment data can result in a range of unintended consequences, such as the shaping and governing of school systems ‘by numbers’” (Johansson, 2016, p. 139).

The idea of ILSA can be traced back to the 1950s when a group of education researchers floated the idea of assessing the academic achievement of students across multiple countries at the United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Education in Hamburg, Germany (Husén, 1979). Today, ILSA is described as “studies in which both achievements of a certain age/grade in one or more subjects are compared across education systems and effects of contextual factors at the system, school, classroom, and student level on achievement are studied” (Bos, 2002, p. 2). Some major ILSA include the *Program for International Student Assessment* (PISA), the *Trends in International Mathematics and Science Study* (TIMSS), the *Progress in International Reading Literacy Study* (PIRLS), *International Civic and Citizenship Education Study* (ICCS), and the *International Computer and Information Literacy Study* (ICILS) (Hernández-Torrano & Courtney, 2021).

Kijima (2010) identified four models of motivation driving countries to participate in the ILSA studies: (1) the financial aid model; (2) the macro-dissatisfaction perspective; (3) the

policy diffusion model; and (4) the rational choice model. In the case of the Philippines, the Department of Education seems to be motivated by the rational choice model. Malaluan (2021) stated that the “objective [in participating in PISA] was to look in the mirror and find out how our learners compared with the rest of the world, and to generate important data to deepen our understanding of the major factors that impact student performance” (p. 4). The Philippines’ participation in ILSA is explicitly spelled out in the country’s Department of Education’s *Policy Guidelines on System Assessment Policy in the K to 12 Basic Education Program* (DepEd, 2017a). The Philippines joined the PISA 2018, the first ILSA the country participated in since the current K to 12 Basic Education Program was implemented.

Given the growing importance of ILSA to educational policies, this paper examines ILSA in relation to pre-service teacher education in the Philippines. It reviews the performance of the Philippines in ILSA and assesses whether or not the country’s education system, including the provision of pre-service teacher education, is responding to the demands of ILSA. This paper also examines the consequential validity of ILSA and whether or not aligning the teacher education curricula with ILSA has the potential to aid in resolving pressing societal issues such as systemic inequities, social justice, and inclusion.

## **Performance of the Philippines in ILSA**

### **English and reading**

In the past three years, the Philippines has participated in two ILSAs in reading literacy – PISA for 15-year-old students in 2018, and the *Southeast Asia Primary Learning Metrics* (SEA-PLM) for Grade 5 students in 2019. In both assessments, the country fared poorly, ranking last among 79 countries in PISA, and fifth out of six Southeast Asian countries in SEA-PLM.

Based on the PISA findings, Filipino students obtained an average score that is 140 points lower than the OECD average of 487 points. The data also indicated that only one out of five Filipino students (19.4%) achieved Level 2, the minimum proficiency level. This finding suggests that the majority of Filipino students may have difficulty in reading (OECD, 2019).

The findings also showed that 38.4% of Filipino 15-year-old students performed within proficiency level 1b - those who can understand simple sentences), or locate explicit information in a sentence, text, or list. Furthermore, the findings showed that 26.7% of Filipino students fell under proficiency level 1a - those who can understand the literal meaning, recognise the main theme/author’s purpose in a familiar text and connect adjacent information with their own prior knowledge (OECD, 2019). Additionally, the findings indicated that only a small number of students, specifically 0.05%, attained Proficiency Level 5, indicating their ability to comprehend lengthy texts and infer relevant information (OECD, 2019).

The results of SEA-PLM showed that Filipino Grade 5 students' average score in the reading literacy assessment was 288 points (DepEd et al., 2021). These also show that based on SDG 4.1.1b indicator (UNESCO, 2022), the majority of Grade 5 students (63%) met the reading proficiency level expected at the end of lower primary education, or Grade 4, while only 10% demonstrated the reading proficiency level as described by SDG 4.1.1b. Furthermore, the findings indicate that more than 25% of the students belonged to the lowest proficiency band in reading literacy, indicating that they would likely struggle later in school.

The results of both ILSA seem to suggest that further analyses are needed to determine the variables for such performance. All these results can inform the policy and other programs for educational reform of the Philippines' education department.

### **Mathematics**

The directions of Philippine K to 12 Mathematics curriculum are the same as those in the ILSA: SEA-PLM, TIMSS Grades 4 and 8, and PISA. These directions are aimed primarily at developing mathematically literate individuals who can use mathematics in everyday life by applying mathematical content, facts, procedures, and skills to come up with solutions to problems in various contexts (Balagtas, 2021).

In the PISA, 19% of the students assessed in the Philippines attained at least Level 2 in mathematics. This indicates that the students, on their own, can interpret and recognise how simple situations can be modelled mathematically. Only 1% of the students reached at least Level 5. These students are able to mathematically model complex situations, and they can also select, compare, and evaluate strategies in solving real-life problems (OECD, 2019). The PISA 2018 is consistent with those in TIMSS in which the Philippines performed poorly (Golla & Reyes 2020). In general, the performance of Filipino students had an average score significantly lower than the OECD average (DepEd, 2019).

### **Science**

The average Scientific Literacy score for the Philippines in the 2018 PISA was 357, which is significantly lower than the average OECD score of 489. The results also imply that a 15-year-old Filipino student can only apply basic science knowledge to detect or identify explanations of scientific occurrences because the mean score of Filipino students falls under Proficiency Level 1a. Likewise, they require additional guidance in order to conduct organised scientific investigations with two variables. The Philippines performed significantly lower in Scientific Literacy compared to a typical 15-year-old student from an OECD country at Proficiency Level 3, who can use fairly difficult content knowledge to create explanations of well-known scientific phenomena (OECD, 2019).

Filipino pupils who are eligible for the PISA scored below Level 2 in around four out of five cases. A total of 35% of students were labelled as having Proficiency Level 1a, while another 35% had Proficiency Level 1b. According to these findings, the majority of students were able to decide which scientific theory best explained the presented evidence

in familiar local, national, and international contexts. Additionally, they are able to discern simple patterns, understand fundamental scientific terminology, and carry out scientific techniques when given clear directions. In the Proficiency Levels 2 to 4, about 21.97% of the students are proficient. In less familiar or difficult settings, these students may provide explanations with pertinent cueing, according to *PISA 2018 National Report of the Philippines* (DepEd, 2019).

Comparatively, the Philippines lags behind in Scientific Literacy in the Southeast Asian region, with almost 4 out of 5 (78.0%) students below Level 2. This entails selecting the best scientific explanation ranging from personal, local, to global contexts, identifying data patterns, recognising basic scientific terms, and following clear instructions to execute a scientific procedure (OECD, 2019; DepEd, 2019). There are broader factors, other than our national curriculum and instruction, which led to this dismal performance. As mentioned by the *PNU Report* (Balagtas & Montealegre, 2020) on the latest PISA, students might have had a challenging time answering the test because it was administered through a computer. While technology has already been streamlined in most of the private and public schools in the country, the traditional pen-and-paper examinations still dominate test administration in the Philippines. The *PNU Report* further mentioned that there are limitations in a computer-based test for science subjects because it cannot cover processes such as decomposition or partitioning.

## **Responsiveness of the Philippine system to the demands of ILSA**

### **English and reading**

In the Philippine Normal University report for PISA, Romero and Papango (2020) argued that there was a total alignment of competencies between PISA and K to 12 reading literacy competencies despite the dismal performance. However, the devil is in the details regarding the state of the country's reading literacy. The joint study underscores, "The K to 12 reading literacy competencies, while broken down into smaller chunks of discrete skills, are not spelled out in detail to allow a more specific interpretation for purposes of designing instruction" (Romero & Papango 2020, p. 33). PISA proves to be more progressive in its definition of reading literacy by situating it in a constantly evolving society and culture; suffice to say that its factors change from time to time. As a consequence, a 21st-century reader must be capable of comprehending various nuances of lengthy texts that come in various forms or modalities (Romero & Papango, 2020). It is in the minute yet consequential incongruence, based on "theoretical orientation and more belief in literacy," that the crux of the Romero and Papango study rests.

Furthermore, their report details that from Grades 7 to 10, the competencies of PISA are reflected in all quarters of the academic year. In fact, there are even text management competencies that are not assessed by PISA which means that we have more supplementing lessons that go beyond PISA (Romero & Papango, 2020). However, they further contend that these excess competencies do not really augment the Filipino reading literacy rate. They also noted that some generic K to 12 reading competency skills have no

one-to-one correspondence with PISA's test items, which means that it cannot directly address a particular area of concern.

By and large, Romero and Papango (2020) recommended that there be an "ease of interpretation" for our curriculum, augment literacy teachers' familiarity with sequencing competencies, special training for teaching reading, and exposure of students to a variety of texts.

### **Mathematics**

The Philippines joined PISA in 2018 and participated again in 2022 to align with global education standards. In the PISA 2018 results, only about 1 out of 5 participants (19%) reached the minimum proficiency level in Mathematics Literacy. Since the result refers only to the cognitive aspect of Mathematics Literacy, DepEd has also looked into non-cognitive variables which will give a deeper understanding of the participants' performance in the assessment (DepEd, 2019, p. viii).

Gaps in Mathematics Literacy competencies were identified in geometry, algebra, computer simulation on complex problems, and real-world problem-solving (Balagtas, et al., 2021). A mapping study by Golla and Reyes (2020) revealed a high degree of alignment between the PISA Mathematics Literacy Framework and the Philippine K to 12 Mathematics framework. However, the Philippine curriculum lacks emphasis on content knowledge, mathematical processes and contextualisation (Golla & Reyes, 2020)

The studies of Golla and Reyes (2020), Balagtas (2021), and Balagtas et al. (2020) recommended reforms in the Philippine basic education mathematics curriculum in order to meet the standards of ILSAs.

### **Science**

The K to 12 Science Curriculum aims to develop scientifically, technologically, and environmentally literate and productive citizens through its spiral approach (DepEd, 2016, in Belmi & Mangali, 2020). Specifically, PISA envisions scientific literacy as understanding science concepts and ideas, deriving scientific and technological knowledge and justifying various evidence and its theoretical foundation (OECD, 2019; Belmi & Mangali 2020). The difference between these goals and the country's performance in PISA is evident.

Balagtas, Garcia and Ngo (2019) found that Mathematics aligns more with the Trends Assessment Framework (TIMMS) than Science in the K to 12 curriculum. Furthermore, they also predicted that given the mismatch of the science curriculum to TIMMS and the low percentage of scientific reasoning, it would be difficult to see improvement in the next ILSA.

For PISA 2019, Belmi and Mangali (2020) noted that a range of topics such as sustainability, population growth, and carrying capacity was present in PISA but are not covered in the Grade 8 Science Curriculum on ecosystems. They further observed that while DepEd's content standards for science easily match that of PISA's content domain,

test items covering procedural and epistemic domains of knowledge are limited and can only be accessed from the performance standards and learning competencies which implies that these might not be directly addressed inside the classroom (Belmi & Mangali, 2020). While verbal cues such as recall, justify, relate, describe, compare, and differentiate come in handy for PISA content knowledge domain, these are only limited to low-level scientific literacy competence in explaining phenomena scientifically (Belmi & Mangali, 2020).

Gaps in the K to 12 spiral curriculum also resulted in unaddressed topics and limited reinforcement. For instance, the topic of physical changes of matter is covered only in Grade 3 and reinforced in Grade 8 in a complex context (Belmi & Mangali 2020). Nevertheless, congruence between PISA and DepEd competencies does not guarantee PISA success (Belmi & Mangali, 2020). In the case of epistemic knowledge, which comprises 10-22% of science test items, Belmi and Mangali (2020) identified that the K-12 curriculum covers at least 21% of these competencies but these are not appropriately distributed across grade levels.

Belmi and Mangali (2020) recommended a curriculum review, improving the learning environment, upskilling teachers, and engaging the stakeholders to propel our PISA Science performance in the next round.

### **ILSA and the pre-service teacher education curriculum**

Belmi and Mangali (2020) emphasised the crucial role of teachers and teacher formation in improving our PISA performance. They highlighted the significance of teachers with specialised knowledge and expertise in science topics. This observation underscores the importance of teacher formation and its impact on improving our performance in ILSA.

A study by Balagtas (2021) analysed the alignment of the Philippine Commission on Higher Education (CHED) mandated curriculum for Bachelor in Secondary Education (BSEd) Major in Mathematics with the PISA mathematics framework. The study examined whether the program adequately covers innovative assessment areas in PISA such as financial literacy, collaborative problem-solving, and creative thinking. The following gaps were identified between the CHED-mandated BSEd Major in Mathematics program and the PISA framework were identified:

- Insufficient emphasis on the application of PISA mathematics and financial literacy in various contexts ranging from personal to home, occupational, societal, and global settings based on how courses are described in the CMO 75 series of 2017.
- Inadequate explicit targeting of the development of PISA collaborative problem-solving processes in the course descriptions.
- Lack of explicit coverage of written and visual creative expressions and creative social problem solving as well as the competencies related to generating diverse ideas and evaluating and improving ideas, which are valued in the PISA creative thinking framework.

Based on these identified gaps, recommendations were proposed to update the policies, standards, and guidelines for Bachelor of Secondary Education (BSEd) major in Mathematics program, ensuring its responsiveness to the demands of PISA and other ILSA in which the Philippines participates. The study also suggests reviewing and contextualising of the mathematics teacher preparation program to meet national and global standards, particularly the demands of PISA. Additionally, it emphasises the need to increase awareness and understanding of prospective mathematics teachers and teacher educators on the framework and impact of PISA in addressing the learning crisis in the Philippines (Balagtas, 2021).

### **Gaps in the Philippine educational system**

For any developing country like the Philippines, the immediate response is always to resort to more funding as a blanket solution. It is evident that our expenditure on education, relative to our GDP, is lower than our neighbouring countries which explains why we rank the least in Southeast Asia in the recent PISA 2019 (Orbeta & Paqueo, 2022). While addressing budgetary concerns is important, there are also significant structural and curricular gaps that must be addressed.

First, although revisions to the K to12 curriculum have already been made four years after joining the 2018 PISA, its implementation is still pending. But aside from the curricular changes, there must be a concerted effort to align beliefs and practices regarding specific literacies in reading, mathematics and science with global standards. Furthermore, instructional materials, such as textbooks, need to be updated and aligned with the competencies in the ILSA.

Second, recommendations consistently emphasise the need to streamline in-service teacher training in these competencies. After all, teachers are at the forefront of educational implementation and should be equipped with the knowledge and methods necessary to target competencies and support struggling students. Recognition of teachers' crucial role can help avoid repeating the tensions they experienced during the initial implementation of the K to 12 curriculum (Bongco & David, 2020). Orbeta and Paqueo (2022) also urged the transformation of DepEd into a "learning institution" that goes beyond its traditional mandate, which is simply to teach because this has not solved our current educational crisis. Suffice it to say that DepEd must transform into a knowledge-producing body where its stakeholders, such as the teachers, can also be active problem-solvers of institutional challenges.

Finally, almost all the studies are silent in dealing with pre-service teachers except for the Balagtas (2021) study which explores the responsiveness of BSEd in Mathematics programs to PISA competencies. Teacher education institutions must have an active role in addressing these gaps. A possible area for teacher education institutions, in collaboration with DepEd, is the examination of the learning competencies in the basic education mathematics curriculum. As mentioned earlier, problems in gaps in content and mathematics processes exist. In this kind of problem, Cil (2022) recommended having an adequate number of goals/competencies in the mathematics curriculum and their

equitable distribution to the knowing, applying, and reasoning domains with the last two receiving more share in the distribution to ensure the effectiveness of the curriculum. The teacher education institutions can respond to this by training future teachers to be able to develop their learners' application and reasoning abilities. Moreover, Orbeta and Paqueo (2022) stressed the importance of early childhood to elementary education in forming competent Filipino learners, underscoring the need for a strong early childhood arm in the education sector. Consequently, curricular auditing among teacher education institutions to align their curricula with DepEd's goals can create a strong ecosystem within educational institutions in the country.

### **Current initiatives of key agencies in responding to the ILSA**

In recognition of the results of the Philippines' low performance in all areas in PISA 2018, the DepEd crafted the Professional Development Program on Assessment and Emerging Literacies (DepEd, 2017b), which aimed to improve the assessment literacy of Filipino junior high school teachers in reading, science, and mathematics. The department has formed a consortium with public and private agencies and organisations to plan and execute the professional development program. The department also prepared the PISA Readiness Toolkit as part of the professional development to reduce the novelty of the PISA for the participants of the PISA 2022 assessment by providing them with practice sets (testlets) and coaching guides in both online and modular formats (DepEd, n.d.).

### **Other countries' responses to ILSA**

Studies show that the impact of ILSA on education policy and reforms in high-income countries can be both direct and indirect. The direct effects can result from the discussions among education stakeholders at the country level, while the indirect effects can result from general discussions in broader policy forums, conferences, or the media (Lockheed et al., 2015). Conversely, the media can also play a crucial role in using ILSA results as "catalyst data" that can stimulate government officials, education stakeholders, and the public to question the performance of the education systems and identify what needs to be improved (Lingard, 2015). The results can also propel countries to learn from the experience of others (Lockheed et. al, 2015).

In 2001, Germany experienced the so-called "PISA shock" when its students' scores in reading, mathematics, and science ranked lower than the OECD average (Odendahl, 2017). PISA shock happens when the PISA results contradict a country's self-perception of its educational system (Baroutsis & Lingard, 2018). Germany responded to this shock with a sense of urgency resulting in education reforms in the country. In the early 2000s, Germany increased federal spending on education, promoted access to early childhood education, emphasised quality early learning, and gradually introduced national education standards for student performance. More support was also given to disadvantaged learners including those who have immigrant backgrounds.

Germany, during the PISA shock period, had established a fairly strong initial teacher education. What was weak was the professional development program for teachers available at that time. There was no career structure that could encourage teachers to

improve their skills and the teaching force lacked a level of professionalism found in many high-performing education systems (Rothman, 2017). The poor PISA results were also attributed to teachers who at that time were over-aging in the profession. They were burned out, unmotivated, and not equipped to properly deal with learners from immigrant backgrounds. Although backed up by a strong teachers' union that could have stalled the reforms, teachers supported the reforms launched by the government. The government, on the other hand, agreed that data on student performance would not be used in accountability systems with any stake for teachers such as setting compensation, promotion, and retention. The teachers agreed to extend the school day without an increase in pay. Teachers' openness and willingness to support the reforms resulted in high regard for teachers and a secure place in policy making (OECD, 2011). The OECD believed that one of the major factors that contributed to the impressive recovery and improvement of Germany was the excellent quality of teachers and the huge focus on the initial selection of teachers, state-based examinations, training, and certification (Tucker, 2017).

Peru has participated in PISA five times with the 2018 results showing that the country has made significant progress in mathematics (+13 points), science (+7 points), and reading (+3 points). Government pronouncements made clear that Peru's current standing in PISA is not yet their ambition for Peru but the results demonstrate that Peru is on the right path toward educational reform (Andina, 2019). Following the 2012 PISA results where Peru ranked last among the 65 participating countries, the government took ownership of the problem and recognised the education crisis maligning the country (Saavedra & Gutierrez, 2020).

Peru's education problems were perceived to be caused by the lack of preparation and commitment of public school teachers. Although these perceptions were true in the case of some teachers, many teachers were genuinely passionate about teaching. Since teachers were regarded as an important factor in the teaching-learning process, it was by reforming the teacher career path, attracting talented individuals to the profession, and getting the best possible performance from the current teacher corps that were given the focus. Peru, through the *Teacher's Reform Law*, enacted in 2012, implemented a new teaching career pathway based on teachers' effort and performance. Retention and promotion have to be based not only on tenure and age but on merit. The government also provided a new scheme for professional development. To attract high school graduates to enter the teaching profession, the education ministry offered generous undergraduate scholarships, about 500 each year, in the best universities. The number was small but it gave a signal that talented students are entering the teaching profession (Saavedra & Gutierrez, 2020, p.158).

Indonesia's first involvement with ILSA was its participation in the 1999 TIMSS and in 2000 PISA. TIMSS results were used by the Ministry of Education and Culture to come up with revised science and math curricula in 2006. For the curriculum revision conducted in 2013, the government used the TIMSS frameworks and results to fill the gaps between the old curriculum and the competencies measured by the *TIMSS 2015 encyclopedia* (Mullis et al, 2016). Indonesia's performance in ILSA showed minimal progress. In 2015 PISA,

42% of Indonesian students who took the test failed to meet the minimum standards in all subjects tested in PISA. The same could be said for the scores on TIMSS and PIRLS (Rosser, 2018). In the 2018 PISA, Indonesia ranked 73rd in maths, 74th in reading, and 71st in science out of 79 participating countries and territories. Although consistently getting the bottom spots in ILSA, the Indonesian government has been committed to improving ILSA scores.

The countries' responses to ILSA results varied depending on how education is viewed in the country. Despite the variations, the Philippines can learn from the responses of these countries. Germany and Peru's recognition of an education crisis is the first and crucial step to deciding on reforms. It is important for the Philippines or for any country "to own" the test results and to recognise the existence of problems because it is only through the admission of "disease" can a cure be administered. Education problems can be simple or complex and based on the country's honest assessment of the problem lies the kind of reforms that must be undertaken. The case of Peru offered a good case study for the Philippines. Since education was in serious trouble, the Peruvian government knew that the solutions had to be bold and massive with reforms sweeping all areas of the education system. Education is a serious and high-stake endeavour that requires all systems involved in the process to work together. The country may be constrained administratively due to the nature of its political system, but Germany also encountered the same challenges brought about by its very own politics and yet succeeded.

Indonesia's commitment to join ILSA is a sign that the country is willing to learn from successful education systems. However, the quest for quality education is a difficult journey. The experience of Indonesia tells us that the Philippines need to have the political and financial commitment to overhaul the education system. This necessitates a fundamental shift in how we see the role of human capital in the development agenda and how we allocate resources for it. Among the countries that made impressive strides in ILSA, all of them have recognised the crucial role and contribution of teachers in the reform process. In fact, the teachers are at the heart of these reforms. Without looking into the initial teacher preparation, teacher training, and professional development of teachers, no education crisis can be overcome.

### **ILSA, pre-service teacher education, and issues in standards-based and evidence-based education**

Bloomfield (2009) attested to the increasing vulnerability of teacher education institutions, particularly on their professional experience programs (i.e., off-campus training, practice teaching) for pre-service teachers, to the imposing accountability and accreditation schemes within the neoliberal framework, especially those from the standards- and evidence-based movement in education. Shahjahan (2011) reported that the standards- and evidence-based movement in education are rooted in the goal for a broadened sense of accountability amid the "crisis of legitimization in education research" which were patronised by the purveyors and advocates of standards- and evidence-based policy and practice in education (Pine, 2001; Shahjahan, 2011, p. 182). Stemming from this criticality, standards- and evidence-based education is not infallible, in fact, Shahjahan (2011)

underlined its complicity to colonial and Eurocentric discourse. He then listed the following as instances of how this colonial account takes root: “(1) the discourse of civilising the profession of education; (2) the promotion of hierarchies of knowledge and monocultures of the mind; and (3) the interconnection between neoliberal educational policies and global colonialism” (p. 182). Shahjahan (2011) went as far as claiming that standards and evidence-based education are unmistakably “another form of surveillance and control in a new educational model that emphasizes accountability and managerialism” (p. 183). The same argument has been espoused by critics who branded ILSA as a form of international and transnational governance (Zhao, 2020); not just an education project but primarily a social, political, and ideological one (Carney & Klerides, 2020; Sjoberg, 2014). Spring (2009) in his work opined that OECD for one has played a huge role in the global standardisation of education through PISA which has become an international standard and therefore exerts power to influence the mathematics, reading, and science curricula of participating countries/territories.

Shahjahan (2011) cited three reasons how the remnants of colonial order take place within the standards- and evidence-based movement: the valuation of education, the excessive preoccupation with standardised evidence, and the neoliberal agenda of transnational organisations. Similar ideas were also found in the work of Anwaruddin (2014) who believed that the World Bank and other international organisations’ “self-described” role in the education sector is based on the notions of research knowledge and evidence-based practice. He added that their active involvement in solving education woes unavoidably brings Western values and priorities into the developing countries, steering educational policies and reforms towards their capitalist agenda (Anwaruddin, 2014). In addition, Shahjahan (2011) interrogated the motivation behind transnational organisations such as the World Bank, International Monetary Fund, and the World Trade Organization to have direct influence and control on global education through funding and investing in curricula that are responsive to their economic policies. Consistent with other scholars in education and the social sciences, the standards- and evidence-based approach is directly contracted to deploy its neoliberal agenda. In short, “rhetoric of accountability requirements and high-stakes testing in the evidence-based education movement is influenced by a global market ideology that promotes the importance of remaining competitive with other countries” (Hursh, 2007; Shahjahan, 2011, p. 194).

Shahjahan (2011) called for a broader perspective on the standards- and evidence-based movement in education by integrating anticolonial perspectives to critically re-evaluate and potentially overhaul the education discipline. Coming from this critical appreciation of the movement, he then proposed that education practice and policy must slow down and take their time to assess the debilitating oversight of the discipline’s own scholars and stakeholders such as systemic inequities and social differences and contexts.

## **Recommendations for policy and practice**

That said, here are the ways in which the Philippines can move forward and achieve substantial gains in ILSA.

### **1. Reframe attitudes and motivation regarding ILSAs**

The Philippine education sector has to reframe attitudes and motivation regarding ILSAs. Our previous discussions show that ILSA is complicit to the colonising gaze within the science and art of education. Moreover, movements in the Philippine educator sector have deeply been affected by the neo-liberalisation of public service and welfare. Having these in mind, ILSA-triggered reforms should not be undermined by these tendencies but rather directed to the emancipation of the Filipino people through quality education that empowers its learners to be ready to face real-world challenges.

### **2. Inclusion of teacher education institutions in basic education reform**

Without question, the heart of this policy paper puts into the spotlight the role of teacher education institutions in basic education. Since ILSA problems have deep structural implications, our views on resolving the low performance should be broader and require re-imagining the very formation and training of future Filipino teachers. Since teacher education institutions serve as the entry point for incoming teachers, they play a big role in producing innovative teachers that both public and private education systems need.

### **3. Reforms in pre-service teacher training**

ILSA does not only provide insights into the performance of the basic education system but also the effectiveness of its teaching force. This urgency loops in pre-service teachers who will be future curriculum implementers of the education system. Thus, it is high time that the Philippine teacher education curriculum be designed to respond to the needs and gaps which the recent ILSA manifested. Reforms should also cover the pre-service teachers' adeptness in teaching reading, scientific, and mathematical literacy across disciplines.

## **Conclusions**

Despite its limits and the criticisms, ILSA results have proven to be a key factor in evaluating aggregate national education systems. Over the past years, results have not been comforting as they reveal the structural flaws of the Philippine school systems while putting key players such as society, culture, and politics into question. As seen by the recent ratings, the Philippines have been lagging behind its regional counterparts in Southeast Asia (Luz, 2022; Orbeta & Paqueo, 2022; OECD, 2020). Therefore, aside from reforms in the public and private school systems, the voice of teacher education institutions is equally important in embarking on these reforms because they are home to pre-service teachers who will eventually be part of the education workforce (Tucker 2017; Saavedra & Gutierrez, 2020).

Teacher education institutions are irreducible stakeholders in achieving better ILSA results for they are vested with the responsibility to train the future work force of the education sector. Their formation will set the tone and mindset of generations of teachers who will be the next leaders, curriculum implementers, and problem solvers of our education system. The Philippines Department of Education should work closely with these

institutions to make pre-service teacher training more responsive to globally-accepted literacy competencies in reading, science and mathematics. Pre-service teachers should be kept abreast with the demands of the current system they will be working with and equipped to effectively teach the baseline literacy skills which ILSA has been upholding. Thus, studies and policies should not be preoccupied solely with examining the relationship between K to 12 curriculum and PISA's institutional competencies, because an equally great need for intervention is the link between the achievement of necessary skills in basic education and a complementary pre-service education formation. In effect, pre-service education should also initiate similar evidence-based reforms.

At any rate, ILSA still possesses the remnants of colonialism (Anwaruddin, 2014; Shahjahan, 2011; Spring, 2009). It is an assessment system that lends well to the success of international superpowers and the Global North, and giving a favourable footing to the Anglophone world as the English language dominates its assessments. Thus, it is not a surprise that when using ILSA as a yardstick of quality education, experts and educators tend to fall prey to the colonial gaze as the education systems of the developing countries are almost always rendered as backward, parochial, and problematic – which, if seen in a broader scope, is not entirely unique to the Global South. Without question, the task at hand now is how we decolonise ILSA in such a way that it does not merely obey a neoliberal agenda. The resolution of this predicament lies in the overarching motivations for ILSA-triggered reforms where instead of being fixated on market-driven demands, we embark on systematic changes to yield improvement of the quality of life, inclusive economies, increased equity and social mobility, and the assurance of a habitable future through sustainability – all of which we can start to achieve through the existence of quality education for all.

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