The K to 12 Program as a National HRD for the Workforce*

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Abstract

The Philippines implemented the K to 12 Program, a comprehensive reform of its basic education, on June 8, 2013, following the approval of the Enhanced Basic Education Act of 2013. Through this reform, the Philippines is catching up with global standards in secondary education and is attaching a high value to kindergarten. The structure, curricula and philosophy of the education system have been undergoing reform and improvement, with key points as "preparation" for higher education, "eligibility" for entering domestic and overseas higher educational institutions and immediate "employability" upon graduating, all leading toward a "holistically developed Filipino" and also contributing to national human resource development (HRD). This paper summarizes this educational policy and some remaining problems it has faced. The author particularly wants to point out that the policy needs to address two kinds of demand-side approaches: one, to promote sustainable schooling of households with economic hindrances; and two, to address workplace demands by providing Filipino youth with new academic and vocational knowledge and skills.

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Introduction

Education, both directly and indirectly, serves as a key labor issue. Education is a social ladder connected to the labor market, where it plays a significant role in furnishing individuals with the basic knowledge and experience needed to participate in labor markets. In other words, education is a stage where human growth and human resource development are exercised. Indeed, one popular theory about the education-to-labor nexus—the "human capital" theory—has already shown interest in education's role in forming a labor force through knowledge, arts and training (Becker, 1962; Becker, 1964).

While we believe that education *per se* has its unique and fundamental value and is an essential human right (Article 26, *http://www.un.org/en/universal-declaration-human-rights*), education always plays a key role in the nexus to labor issues. The Philippines has been known for its relatively high level of education (Nakanishi, 1990; Balisacan, 2003; Symaco, 2013). In the Spanish colonial era, a number of institutions of higher education were already established in the Philippines (Tanodora, 2003). In the 20th century, under the rule of the United States, the American system of modern formal education was established (Tanodora, 2003). More recently, after the country's commitment to the United Nation's programs of Education for All (EFA) and the Millennium Development Goals (MDGs), Philippine universal primary education (UPE) progressed dramatically. Can we thus be optimistic enough?

This article attempts to discuss the issues confronting basic education in the Philippines and the limitations to better human and labor development.

A new and historic educational dynamic was introduced in the Philippines on May 15, 2013 with the approval of the Enhanced Basic Education Act of 2013. Also known as the K to 12 Program, the act seeks to enhance the Philippine basic education system by strengthening its curriculum and increasing the number of years for basic education,

¹ Most of those institutes were for the purpose of training clergy.

appropriating funds therefor and for other purposes. It was signed into law on June 8, 2013. (http://www.officialgazette.gov.ph/2013/09/04/irr-republic-act-no-10533/) With the program, the Department of Education (DepEd) started a fundamental overhaul of the country's educational system. It is "the most comprehensive basic education reform initiative done in the country since the establishment of the public education system more than a century ago" (Message from the Department of Education in SEAMEO INNOTECH, 2012).

What does the K to 12 Program contain? Why is this reform the most comprehensive? What are the expectations for Philippine education? Since this reform is still ongoing, it is not yet possible to answer these questions comprehensively. This paper does not seek to evaluate the reforms yet; rather, it seeks to marshal the contents of the reform program and examine them from social development and labor-issue perspectives in order to interpret the thoughts and ideals underlying the program.

Key features of the K to 12 Program

Lengthened secondary education and mandated kindergarten

Under the K to 12 Program, two more years are added to the existing four years of secondary education. From a single high school (HS) with only four years, the program prescribes four years of junior high school (JHS) and two years for senior high school (SHS). Consequently, the program extends the total years of Philippine basic education from 10 to 12, and one year of kindergarten (K) is mandated as part of basic education (Table 1) and is thus now called K to 12. The extension of secondary education means that students aged 16-17 will now be in SHS, and can enter tertiary education at age 18 (as highlighted in Table 1).

The extension of secondary education through age 17 will make the Philippines conform with ASEAN as well as foreign countries. Its past system with a single four-year HS ending at age 15 caused both pedagogical and socio-economic problems: e.g., congested curricula

² Aside from this new program, possibly the biggest change in education was in the Philippine Constitution in 1987 which made elementary education compulsory. The constitution reform attached high national priority to education development in the Philippines more than before.

due to schools cramming many courses in order to fulfill mandated educational requirements; the difficulty of HS graduates to immediately enter overseas tertiary educational institutes because of age ineligibility; and the difficulty of HS graduates to take up employment immediately due to being under the legally employable age. The K to 12 Program is expected to mitigate these barriers to the labor force and higher education.

Table 1: The Philippine School System Prior to and Under the "K to 12" Program

Age	~5	6	7	8	9	10	11	12	13	14	15	16	17	18	19~
Kindergarten	✓														
Elementary		✓	✓	✓	✓	✓	✓								
Secondary JHS								✓	✓	✓	✓				
Secondary SHS												✓	✓		
Tertiary														✓	✓

Source: Based on information from Department of Education (http://www.deped.gov.ph/k-to-12).

Features of the curriculum

Lengthening secondary education by two years will help decongest the curriculum. The K to 12 Program also makes possible the seamless continuity of basic education from kindergarten, elementary school up to JHS and SHS. Graduates will obtain a high school diploma. They can also earn a Certificate of Competencies or a National Certification, proving that they have acquired a mid-level skill in their specialization when going on to higher education or searching occupations.

The learning goal in the new K to 12 curriculum is acquisition of 21st century skills in: (1) leaning and innovation, (2) Information Technology and media, (3) effective communication, and (4) life and career (SEAMEO INNOTECH, 2012). The aim is to bring about "holistically developed Filipinos with 21st century skills" who are ready for employment, have entrepreneurship abilities and possess mid-level skills and higher education upon graduation from SHS. Prior to the K to 12 Program,

two curricula were in effect: the 2002 Basic Education Curriculum (BEC) and the 2010 Secondary Education Curriculum (SEC). These two curricula aimed to promote functional literacy and lifelong learning. The K to 12 Program aims to promote holistic skill development leading to employment and higher education.

Reforms at Each School Level

(1) Kindergarten

Republic Act No. 10157 (An act Institutionalizing Kindergarten Education into the Basic Education System and Appropriating Funds Therefor) was enacted on January 20, 2012. This act declares:

"In consonance with the MDGs on achieving EFA by the year 2015, it is hereby declared the policy of the State to provide equal opportunities for all children to avail of accessible mandatory and compulsory kindergarten education ... to sufficiently prepare them for formal elementary schooling."

With the approval of the Act, kindergarten education is now free and mandatory. Kindergarten, i.e., Early Childhood Education (ECE), is the first level of the basic education system. During early childhood, the brain develops by up to 60-70 percent of its adult size. This period is crucial for a person's future cognitive and physiological development and growth (Sachs, 2015, pp. 252-262). Better pre-school education leads the "readiness" for subsequent educational stages by enhancing non-cognitive skills as well. Economists also focus on the higher returns of pre-school education through the life-cycle skill accumulation process (Cunha and Heckman, 2008, Sachs, 2015). Kindergarten is now a dramatically higher priority than before.

(2) Elementary Education

Unlike secondary education, elementary education has not been

³ http://ledac.neda.gov.ph/Resources/RA%2010157%20Kindergarten%20Education%20Act.pdf (accessed July 28, 2013)

lengthened under the K to 12 Program. Yet, the medium of instruction has changed significantly. It introduces the "Mother Tongue-Based Multilingual Education" (MTB-MLE) for kindergarten and grades 1-3 (for MTB-MLE in the Philippines, see Wa-Mbaleka, 2014b). The previous curriculum had provided for bilingual education, but "bilingual" referred to English and Filipino. This did not always work well in the Philippine context (Wa-Mbaleka, 2014a). The country is multilingual.

The Filipino language, a main component of which substantially corresponds to Tagalog, with 37.5 percent of households mainly speaking it in 2010 according to the Census of Population and Housing by the National Statistics Office (NSO) (currently called Philippine Statistics Authority), is spoken over Metro Manila, central and southern areas in Luzon island and Southern Tagalog Region. However, there are more than 170 languages spoken in the Philippines (Ricardo 2008) and the other major languages are Cebuano (22.9%), Ilocano (8.1%), Hiligaynon/ Ilonggo (6.6%), and Bikolano (4.3%) (figures in parentheses refer to percentage of households mainly speaking the said language in 2010 over total household numbers, according to the NSO's Census of Population and Housing). Thus, non-Tagalog speaking children had difficulty or were burdened with additional costs when taking classes taught in English and Tagalog (Ricardo, 2008). Besides their local languages, they had to learn Filipino (Tagalog) and English as second languages in order to attend school. Under the MTB-MLE in the K to 12 Program, 11 local languages will be used (Table 2). This is expected to better enable younger children to follow classroom instructions. From grades 4 to 6, the language will shift to Filipino.

Table 2: The Twelve Major Languages Serving as Teaching Language (Gr 1-3)

Tagalog	Cebuano	Maranao	Kapampangan
Hiligaynon	Chabacano	Pangasinense	Waray
Iloko	Bahasa-sug	Bikol	Maguindanaoan

Source: SEAMEO INNOTECH (2012), p. 22.

(3) Secondary Education

As described earlier, the big changes in the Philippine educational system under the K to 12 Program take place in secondary education. These changes are in structure, curriculum and assessment (Table 3). The most visible change is the lengthening of secondary education to six years and its division into JHS and SHS. Regarding curriculum and assessment changes, the new curriculum focuses on a "spiral approach" that highlights the building of knowledge on previously learned knowledge.

Table 3: Main Changes in Secondary Education: Structure, Curriculum and Assessment

	Туре	Content of Change
(1)	Structure	 Lengthening the years of education Adding two years to make it a total of six 6 years Divided into junior and senior high school
(2)	Curriculum	 Understanding by Design (UbD), identifying desired results, determining acceptable evidence, and planning instruction will be replaced by the spiral approach wherein learning is a process of building upon previously learned knowledge
(3)	Assessment	The National Achievement Test (NAT) taken by second year students will be replaced by an examination at the end of Grade 10 and Grade 12.

Source: SEAMEO INNOTECH (2012), pp. 26-27.

Under the new curriculum, assessment will be based on an examination at the end of Grades 10 and 12. This will replace the national assessment test taken by secondary students at the end of the second year. The keyword "decongest" is embodied in the allotment of time in the new curriculum for secondary education. Time allotted to the core subjects of English, Filipino and Math as well as to some courses that used to fall under the category of "Makabayan" has decreased. Moreover, although the allotment of time per week is decreased corresponding to the lengthening of high school years, the total sum of time allotted

⁴ Makabayan education in high school has been a characteristic of Philippine secondary education and is meant to promote social cohesion and uniformity among Filipinos.

to courses will actually increase⁵. Thus, the amount that students learn overall will increase while each week the amount of time students spend taking core courses and some other classes will decrease. This is a key feature of the new "decongested" curriculum.

Under the K to 12 curriculum, the expectation is that students will be able to study more slowly and sufficiently each week, and take their time to review what they learn in school. Under the older congested curriculum, students had less time to review and absorb what they learned, leading to what could be called learning "indigestion." With the new "decongested" curriculum, there is much expectation that for students, learning will be more sufficient and efficient.

Selected issues on the "K To 12" Program

The previous section essentially sets forth the facts and features of the K to 12 Program. This section will examine the program from three selected perspectives: comparative education, pedagogy and socioeconomics.

Comparative education perspective

It is important to examine how the policy is interpolated with existing thoughts on education. While on the surface this reform appears to seek the Philippines' inherent values, the outcomes it is seeking imply that the K to 12 Program is ultimately connected to the globalization of education. In this regard, Joel Spring has introduced useful concepts of the "world culture theory" in explaining the globalization of education.

He writes, "[t]he basic ideas of world culture theorists" are "that the spread of mass schooling and a uniform curriculum accompanied the spread of the Western concept of the nation state and that national policy leaders select from a global flow of best educational practices" (Spring, 2009: 118). World culture theory holds that there is a common world culture in various dimensions—political, economic, social, cultural and even educational. Whereas each country has its own educational system and institution, each of these national systems and institutions will, in the

⁵ In reality, the high school curriculum cannot be decongested as expected with the addition of two years because some subjects previously taught as general education in college are now partially transferred to the SHS curriculum. Regarding the influence of the K to 12 Program on the readiness of higher educational institutions and their teachers and instructors for new curricula between SHS and general education in collegiate level, please see the latest literature, Acosta and Acosta (2017).

long run, as though drawn toward a common ideal form, converge to be transformed into very similar ones. Spring summarizes the key points of the world culture theory as follows (Spring, 2009: 17):

- 1. Development of a uniform global education culture sharing similar goals, educational practices, and organizations;
- 2. Similarity of national school systems [as] a result of the adoption of a Western model of the nation-state which requires mass education;
- Most national schools systems share a common educational ladder and curriculum organization;
- 4. Global uniformity of schooling provides entrance into the global economy.

As set forth in the four points of this theory, educational reform in the Philippines is integrating its system into the common global one. Consequently, the progression of education in the Philippines from kindergarten to tertiary education is corresponding more closely to the common educational system existing in most countries. After graduation, Filipino students are expected to behave as good laborers in the Philippine and global labor markets which enhanced technical and vocational education has prepared them for. In a globalized society, Philippine education has no choice but to transform itself into a global-friendly system. Through a self-conscious effort to conform to common international educational practices, the Philippines is undertaking a fundamental reform that is different from what had previously existed.

Pedagogical perspective

Although converging toward common world educational norms, the Philippine educational system has unique aspects. The MTB-MLE mentioned in the previous section concerns the ethnic and lingual diversity of the country which, prior to the K to 12 Program, was largely overlooked. Under the new curriculum, along with studying Tagalog, children in Grades 1-3 will be able to take lessons in their mother tongue.

How well this change copes with the country's multilingual challenge will be a major issue in a future evaluation of the Program.

Regarding the curriculum, the existing BEC and SEC are being replaced with the K to 12 Curriculum (KTC). The pedagogical features of KTC are preparation for further study or work and efficiency in the conduct of lessons and courses and in measuring the outcomes of education. Expressions about preparation for higher education or employment are ubiquitous in the declaration and documents of the new curriculum. In addition, multilingual education plus more frequent testing to assess the outcomes of schooling will lead to more efficient student learning.

However, "holistic development" or "the holistic development of Filipinos for the 21st century" are still abstract concepts (also see Adarlo and Jackson, 2017). The model of the ideal learner in the new curricula is relevant in the upgrading the Filipino human resource and workforce in the era of globalization. Preparing human resources for a greater variety of opportunities in learning and employment are becoming the central role of education. These elements are measurable in the sense that educational and socioeconomic statistics are quantitative. The progress of student learning and the state of employment are data that can be examined and interpreted statistically.

Yet, "holistic development" has to range beyond statistical and quantifiable dimensions. The non-quantifiable aspects of learning and the student's non-cognitive skills must also be developed (Cunha and Heckman, 2008, Sachs, 2015). The K to 12 Program mentions the non-cognitive dimension that is attached to the skills and ability of a student but the actual way it tries to develop this is unclear. Despite being difficult to measure, holistic aspects like mutually understanding social and cultural differences, the ability to express oneself, or a willingness to cope with risk are important to Filipino society and have to be fostered through education.

Socioeconomic perspective

Education has long been an engine driving social and economic development. Studies on the economics of education have shown that education is a prepotent explanatory variable of the Gross Domestic Product (GDP) and individual income (Becker, 1964, Mincer, 1974; among others). Additional education brings added economic growth and other beneficial outcomes, such as declining birth rate and improved health. Improving education through the K to 12 Program has these benefits to the economy and society in mind. SEAMEO INNOTECH (2012) refers to studies on the economics of education⁶, such as those of Psacharopoulos and Patrinos (2004), Hanushek (2005), and Hanushek *et al.* (2008), which explain the impact of human capital investment (including education) on economic development.⁷

At the individual level, education has a positive effect on income and the probability of obtaining a job. This is particularly important for poor people since they have few resources and education offers practically the only opportunity for moving up the socioeconomic ladder. Recent area and microeconomic studies on the Philippines show that education has a positive association with urban and rural income (Nakanishi 1991; Maluccio, 1998; Estudillo *et al.* 2009).⁸

Beyond economic growth and increased income, education has other positive effects. It contributes to social cohesion and mutual understanding among others and at the individual level, it plays a role in the formation of personality. Thus, enhancing basic education contributes not only to economic growth and poverty alleviation but also to social unity and personality formation. The Philippines has long suffered from endemic social and economic problems such as unemployment, poverty and ethnic conflict. The K to 12 Program and reform of the country's education can be seen as one step toward overcoming these long-standing problems.

⁶ In referring to Psacharopoulos and Patrinos (2004), SEAMEO INNOTECH (2012) argues that the additional years of education will bring significant economic benefit to the national economy.

⁷These studies emphasize that not only the amount of input into education but also the quality of education are important for development. For instance, teacher training is necessary for quality development.

⁸ Nakanishi (1991) conducted a multiple regression with OL5 (Ordinary Least Squares) using data gathered from an urban area in Metro Manila and found a positive correlation between education and income. The other studies used more econometrically modern methods that factored for endogenous bias. These showed that there are high returns on education in the rural areas of the Philippines.

Discussions

Highlighting the role of secondary education

Secondary education is the bridge between elementary and tertiary education, as well as to the labor market. Its importance is in the role it plays in fostering higher learning and developing the country's human resource. It prepares high school students for study in institutions of higher learning, the graduates of which play a central role in a modern industrialized society. However, the role of secondary education

goes beyond education. It is an important period in the formation of personality. Students in secondary school are in their adolescence and susceptible to influences from the external environment and other people. Knowledge, experiences and memories that students acquire in this period influence their personality. Therefore, enhancing and improving this stage of education and life is of particular importance, not only for HRD and economic development but also for fostering a population of socially and mentally healthy people.

Pedagogical issues, teachers, and teacher teaching

One of the main goals of the K to 12 Program is to contribute to a "holistically developed Filipino." The meaning of "holistically" is obscure and developing such a Filipino requires better quality education. Here, pedagogical improvement matters. Under the K to 12 Program, curricula are in the process of being improved, but another basic problem of pedagogy is related to teaching. For better pedagogy in schools, teachers play the crucially important role: 9 teachers need adequate teaching facilities, materials and equipment. Classrooms and the other physical resources for teaching also matter.

The government has a plan to supply the resources, aiming to fulfill the need by the end of 2013. 10 Judging from the amount supplied between 2010 and 2012, it appears that a considerably high number of classrooms, desks and textbooks have already been delivered.

⁹ To improve students' performances, teachers' quality is crucial (Hanushek 2005: pp. 14-15).

¹⁰ http://www.gov.ph/images/uploads/achievements-table.png (accessed July 28, 2013)

However, given the size of the shortages which have traditionally plagued Philippine education, it is still a challenge to satisfy the huge need even now.

Along with sufficient resources, the success of the new education program will depend on the training and upgrading of teachers as well. According to SEAMEO INNOTECH (2012), there should be no additional load on teachers since the curricula are to be decongested. Moreover, the Magna Carta for Public School Teachers provides that teachers should not teach more than six hours a day. If these conditions are fulfilled, the additional time available is expected to be allocated to teacher development. Here, the Philippines could cooperate with foreign countries that have developed successful programs for teacher training.

However, the newly added 2-year SHS poses a human resource scarcity problem: that of eligible teachers. As footnoted previously, the SHS will undertake some subjects that used to be taught as part of the general education program in the collegiate level. Thus, the number of new teachers needed, along with the teachers' knowledge and skill in these new subjects, matter significantly. This will be a serious matter especially in remote and less populous rural areas. Though employing part-time teachers can be a temporary solution, what is needed is to enhance the long-term teacher supply and training in the coming decades; otherwise, SHS (as well as lower education) cannot be sustainable.

Further demand-side approach needed

The K to 12 Program is a supply-side policy in that it is meant to improve the supply of education. The DepEd declared free public schooling from kindergarten through high school. Certainly, tuition-free schooling is necessary. However, the indirect costs should not be forgotten. For children living in remote areas, there are costs for transportation or perhaps for moving in with a relative or friend who lives in a central area where there are more schools. The cost of clothes is also important; Filipino students wear uniforms from the elementary level. There is also a cost of textbooks and stationery. And very importantly for poor households where children are expected to earn money and contribute to the household livelihood at an early age as possible, there is foregone income from children who are students (referred to as opportunity cost in microeconomics). Therefore, free education is, in fact, not free,

especially for poor households.

Poverty still matters even with tuition-free education. The DepEd is aware of the financial burden of two additional years of basic education on households and instituted a school voucher program to financially subsidize the grade 10 completers (DepEd, 2016a; DepED; 2016b). This voucher program is not based on household or student units but on the school units (DepED, 2016a; DepED, 2016b). Surely, this government-based subsidy is timely and can help those with financial and other problems hindering continuous education. However, we should also note that households, especially in provincial rural settings, face the aforementioned indirect and opportunity costs. Here, not only supply-side and normative approaches but also demand-side and empirical approaches are needed. For instance, perspective with household economics to study the interactions of schooling and labor-related scarcity of the school-aged adolescents are typically necessary.

Workplace-demand matching to serve as HRD program

As the previous subsection notes, the demand analyses for those students and household who are demanding education must be needed. Particularly, it is necessary to analyze to what extent the additional years in schooling impacts the behaviors of students and households to education, after the implementation of the K to 12 Program. After the successful sequential implementation of the K to 12 Program for younger grades in the coming years, the national workforce will include more SHS as well as college graduates.

Some SHS graduates will be equipped with vocational and technical skills and qualifications unlike pre-program time. The Philippine economy has long been facing severe unemployment problems, especially for new college graduates (Balisacan, 2003). In the coming years, more SHS graduates with vocational-based training are coming into the labor market. Firms have specific labor demands based on knowledge, skills and expertise. In this sense, workplace labor-demand must be shared with educational policy makers and school management. If demand for college graduates does not increase, the demand for additional SHS graduates should be sufficiently intermediated. Some workplace demands will be in so-called niches that were not previously satisfied by conventional college graduates.

The K to 12 Program has good potential to equip and better prepare students with academic and vocational knowledge and, in terms of labor-demand, with basic skills prior to participation in the labor force or on-the-job training. To utilize the K to 12 Program for better HRD, the feature of educational policy attempting holistically at enhancing the human capital at the national level shall be translated into the human resource development. In this translations, frequent and quality communications between firms and workplaces on one hand, and educational policymakers and local schools on the other, should take place more intentionally, for the K to 12 program to overhaul Philippine education and become a nexus to national HRD.

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