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Philippine basic education 1999-2004: Analysis, recommendations, and plans

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Philippine basic education: A problem of quality

In 1925, when the Philippine educational system under the American colonial government was subjected to systematic evaluation 27 years after the American period began, one significant finding of the system was that Filipino children were two-and-a-half years behind their American counterparts in reading skills [Monroe 1925].

The lack of equalization was understandable given the fact that for Filipino children, English was a second language whereas it was the native language for American children. Moreover, although a total number (2,000) of Thomasites or native speakers were deployed as teachers from 1901 until 1920, by 1921, after the Filipinization of the bureaucracy under Governor General Francis Burton Harrison, only a few Americans were left in the Philippine educational bureaucracy; the English supervisor at the Bureau of Education (later Department of Education) continued to be American, however. De facto almost from the beginning the English language was taught to Filipinos by Filipino teachers, who were themselves schooled under native speakers but whose mastery of English was that of a second language.

Reading was initially taught with American-authored readers, then adapted to the Philippines; by 1919 when the first Philippine readers of English in the Philippines had been pub-

lished by the Bureau of Education with a Filipino as the main author, the famous "Camilo Osias readers".

Seventy-five years later, at the century's end, the complaint is still being made about the inadequacy of the reading skills of our students. Without proper testing instruments, it is impossible for us to make valid comparisons, but one can venture to say that in the light of what has happened to Philippine education, compared to the US counterparts in Grade 10, the average Filipino student in Grade 10 is almost certainly more than two or two-and-a-half years behind his American counterpart. English continues to be a second language; there are more students to educate (there were 10 million Filipinos in the 1919 census, now there are over 70 million based on the 1995 census); and there have been tremendous sociological changes, making English now more of a foreign language and Filipino the national language of the Philippines.

In the meantime, the language problem of the Filipino continues. In fact, Najeeb Saleeby [1924], one of the most enlightened American educators of the 1920s, writing about the problem of language, had urged the use of the local language, preferably a candidate for national language status, to be used as the medium of instruction instead of English and lamented the fact that years later this step had not been taken. He saw then and foresaw later on that the lack of local language as the main medium of instruction and continuing use of English, while

not without its benefits for Filipinos, was militating against the rapid growth and development of functional literacy and education among Filipinos. The 1974 Bilingual Education Policy and its renewal in 1987 were attempts at compromise between the development of the national language and its use as a medium of instruction to facilitate learning, and the continuing use of English. As the Gonzalez and Sibayan [1988] evaluation demonstrated, however, language policy and practice alone could not explain the continuing erosion of achievement in the system, brought about by other problems of a contributing nature: population increase, lack of resources, poor management of schools, lack of proper preparation of teachers in content and in the methodology of teaching English. The Philippine Government in 1940 had deducted one year from the 7-plus-4 sequence, thus shortening the basic education experience by one year; this one year given up temporarily because of financial problems was never restored even after years of independence except in private schools. Moreover, the working conditions in most public schools, the poor compensation scheme until 1997, and the deficit in contact hours because of class interruptions, have all contributed to today's problem of underachievement.

National measures of achievement were provided at one time (from 1973 to 1993) by the National College Entrance Examination Test (which was however abolished by an Act of Congress (RA 7731) in 1994). In 1993, achievement tests at the end of Grade 6 (the National Elementary Achievement Test or NEAT) and at the end of Grade 10 (National Secondary Assessment Test or NSAT) were instituted from 1993 to 1997 as a substitute for the NCEE. For reasons of economy only a sampling of 40.11 percent was taken from SY 1997/98. This step however made it impossible to use the results for monitoring schools on an individual basis and could not give each student an indication of his or her achievement vis-à-vis his peers.

Whenever region-wide tests are analyzed at lower levels, such as for example the Survey

on the Outcomes of Elementary Education in 1976, the results of the Bilingual Education Survey Evaluation of 1988, and the disaggregated scores by regions of the test results of NEAT and NSAT (NETRC), the finding we arrive at is that achievement is according to expectations (75 percent and higher) from Grades 1 to 5 but that in Grade 6, achievement as measured by a criterion referenced tests based on a table of specifications, levels off to about 50 percent in all subjects (lower in science, higher in Filipino) and that this low score continues every year thereafter even up to fourth year high school (Grade 10).

If one were to consider that only half of educational targets are attained from Grade 6 on, it would be safe to say that compared with his international peers (no longer just American) using Grade 10 as the point of comparison, the Filipino is more than two-and-a-half years behind his Grade 10 peers in developed countries.

Some other indicators of weakness are the periodic International Mathematics and Science Study test results, which show Filipino children consistently among the bottom three in mathematics and especially science.

Informally, and using only anecdotal experience, there are Filipino children who finish Grade 6 but are hardly able to do basic interpersonal communication [Cummins 1978] at the end of schooling (we still need national measures of reading achievement in Filipino). This state perdures in high school, so that many high school students (roughly 20 percent going by experience with children who do badly in English language grades including reading) go through high school barely able to communicate in English, making the mastery of content in English impossible. What results is *semilingualism* [Toukumaa and Skutnab 1977], a condition where a student has not mastered even one language (native or foreign) to the point that s/he can carry on higher order cognitive activities in it.

One crucial area of need is systematic testing and measurement from year to year with comparable tests to enable us to draw valid

conclusions on either improvement or deterioration.

The Philippines has a satisfactory elementary schooling system up to Grade 5, with basic and functional literacy attained and with most students mentally dominant in Filipino more than in English. Higher-order reading and critical reading skills, however, are seldom attained by Grade 5, and there is a danger of returning to illiteracy if the students drop out before the end of Grade 6. The losses are that for every 100 pupils who begin Grade 1, only 67 finish Grade 6. Of the drop-outs, 8 percent occur between Grades 1 and 2, people who never become fully literate, while the rest drop out between Grades 4 and 6 [DECS 1998]. In high school, of an original 100 in Grade 1, only 46 finish high school, creating another cohort of out-of-school youth with few possibilities for gainful employment.

In high school, even among those who survive, achievement in English, Science, and Mathematics is low, with at best Grade 7 and 8 levels by international standards, and with only elites gaining mastery of one language (be it English or Filipino) to the point of being able to carry on higher cognitive activities in it. For gifted students in good schools, however, mastery of the language arts and skills of both Filipino and English is attained, thus approximating (though never fully attaining) the ideal of a balanced bilingual through the school system.

Key problems

The most fundamental problem of the education system is that the rate of annual population growth is still at 2.3 percent and has been that way without much change over the past ten years. After dramatic strides in the 1970s and 1980s when population growth slowed down from 3.2 percent to 2.3 percent and even 2.1 percent, the last decade has seen little movement towards further reduction. Present cohorts of students now total 12 million (1998/99) for elementary school and 5 million (1998/99) for high school. The survival rate is still unsatisfactory, but in absolute terms the num-

bers have been increasing and the survival rate at least improving, from 67 out of 100 five years ago to 69 out of 100 now, at the elementary level. High school graduates (from an initial Grade 1 cohort of 100) have improved from 43 percent to 46 percent. Moreover, the 1987 Constitution which legislated free secondary education (Grades 7 to 10, or from First Year to Fourth Year high school) causing an increase in numbers. In a way, the Philippines has also become a victim of its own success in retaining more students and in increasing — albeit not dramatically — the survival rate. When a policy was made in 1996 to start Grade 1 at age 6, a sudden influx of students in the system meant a one-time increase of over half a million to the total school population.

The net effect has been a strain on classrooms, teachers, textbooks, and science equipment, which call for many more resources than the present 17 percent of the budget (in FY 1999) of P81.7 billion.

The result is an inefficiency in teaching and the failure to get out of the groove (of almost three decades years now) of achievement at the 50 percent level (half of what is to be taught in the prescribed syllabus). Poor teaching conditions, inadequate equipment and books, and above all else, poorly prepared teachers (products of the more than 500 colleges of education that we have) who are weak in content and in a liberal education skills. The lack is especially dramatic in science and mathematics. According to the latest findings [Ogena 1992] only 71 percent of math teachers are prepared, and 21 percent of chemistry teachers, 8 percent of physics teachers, 41 percent of biology teachers, and 40 percent general science teachers are qualified to teach (with a full undergraduate major). It is difficult to implement the bilingual education program, which calls for the English Language Class, the Math Class and the Science Class to be taught in English, since the phasing in of the language medium is not rationalized (all teachers are supposed to be teaching math and science in English from Day One. Since pupils do not understand English, at least those in the rural areas, what is actually

taking place is teaching in the local vernacular, then Filipino or English, depending on the subject. Gonzalez and Sibayan [1988] have made the contention based on empirical evidence and regression analysis that what explains success or failure in achievement is not so much the medium of instruction but the teaching/learning conditions in the school, its location, its community, its staff and management. Especially for transition, however, the language of instruction still has to be reckoned with, a reckoning that is not happening at present.

Other factors contributing to inadequate achievement are the shortened pre-university experience (10 in the Philippines, 12 or more in other countries), which separates the rich from the poor (who do only 10 while the rich go through Grade 7 and pre-school and can have as many as 13 years' preparation); the lack of an English-speaking community in the rural areas to reinforce language lessons; the distractions from many activities demanded of teachers and schools making a short calendar year (it has since increased from 180 to 210 school days); poor learning conditions (half of rural areas have no electricity; many more urban and city schools and country schools have problems with running water and proper sanitation); the lack of equipment for science and mathematics; the lack of teachers in densely populated urban areas, especially Metro Manila (resulting in large classes of pupils crowded in a room); and poor study conditions (including the absence of a good library). Science and mathematics classes do not have the proper equipment for demonstration and discovery activities.

A suitable and viable target for the future is to stick to fundamentals and to slowly increase the performance-scores of all students across the country in all major subjects (Filipino, English, Social Studies, Mathematics, Science) over the next decade from their national averages of 50 percent and below (it is low for science, higher for Filipino Language) to at least 60 percent or more in the next decade.

Changes needed

The most necessary ingredient for any kind of long-term change is human resource development for faculty and administrators.

Faculty should be trained not only in procedures and methods but above all in *vision* of what education is all about (through in-depth training in the liberal arts instead of a multiplicity of courses) and in *content* by majoring in one subject in a university where the programs for the arts and science are adequate.

This is easier said than done, since the number of universities offering adequate arts and sciences major programs is quite small, especially in the needed areas of mathematics and sciences. Traditionally these courses have not been subscribed to by many students. Few colleges and universities have been willing to invest in trained manpower and scientific equipment for programs that attract only few students and which must therefore be operated at a deficit or become cost centers.

Thus, a reform of teacher education is required to make any long-term improvement in the system of instruction. The task of faculty development however is almost mind-boggling. There are 370,000 elementary school teachers and 100,000 high school teachers that need to be retrained in order to ensure that the new batches of teachers are better prepared than their elders. (There were 84,233 graduates in 1995/96, and 7,000 are hired by DECS annually).

Of the 35,548 elementary schools, only about 45 percent have a principal or a head teacher; among the 3,992 high schools, only 53 percent have a full-time principal. The rest are either teachers-in-charge, or heads, who receive a salary according to their level as teachers but who perform administrative work, usually in an acting capacity. Stabilization of the system makes it imperative to give these administrators regular positions so that they can function in security and with the assurance of permanency to carry out good management of the schools.

Another way of relieving the continuing problem of teachers (21,000 needed in 1998,

7,209 to be filled in under the 1998 budget, with 15,000 more to be filled in the future) is to return teachers to teaching and to create new positions for non-teaching staff functions, such as physical facilities maintenance and registrar functions. Most of these positions are currently filled by teachers, since there are no budget items for non-teaching staff. This results in a waste of training and talent and an expensive non-teaching bureaucracy. The only way to remedy this is for the Department of Budget and Management, the government agency charged with matters of this kind, to create new items for non-teaching staff and then to return the teaching staff occupying non-teaching positions to teaching functions.

Classroom shortages are another problem. To illustrate, meeting the shortage of 21,000 classrooms at the start of 1998 (of which 5,500 were to be constructed under budget 1998 and the other later) required a one-time capital expenditures of approximately P10 billion. Each new classroom with a toilet costs P350,000. A scheme being explored is to have an outsider capitalize and build the needed classrooms and for DECS to use these facilities under a lease-purchase agreement. This matter is under technical study at present.

Finally, the system of evaluation must be reviewed and improved. Under a presidential decree of Ferdinand E. Marcos (PD 146), a national school leaving examination for secondary school was instituted, called the National College Entrance Examination (NCEE). This system prevailed from 1973 to 1994, when it was done away with. The objectionable political portion meant that those who scored less than the prescribed cut-off point of the tests were not allowed to enroll in college; this matter was challenged on constitutional grounds by the private schools and was the reason for the shift from the NCEE to the National Secondary Assessment Test (NSAT) in 1994 and the National Elementary Assessment Test (NEAT) in 1993. The scores in NEAT and NSAT were made a component of the student's final grade. For three years all students leaving elementary school were tested, resulting in our being able

to compare regions but not divisions and schools. This nullified the primary purpose of the test, which was to monitor achievement in the whole system and to gauge whether or not we were achieving improvement. Moreover, the tests were not equalized statistically from year to year (some new items were added which were not in the original test). It is not clear whether they were equalized for difficulty and discrimination, or whether the overall test score could be compared with that of the previous year. Presently a special committee of consultants is helping the National Education Testing and Research Center (NETRC) of the Department to improve the test, assure statistical comparability from year to year, do total census testing (not merely a sampling), and do in-depth studies on the content of the test and the skills called on to allow progress to be monitored yearly.

In addition, our evaluation specialists are likewise working on forms for school visitations and accreditation at the elementary and second level, with help from the Philippine Accrediting Association of Schools, Colleges and Universities (PAASCU) and the Federation of Accrediting Associations of the Philippines (FAAP).

Forms are likewise being revised for the reinstitution of classroom and school visitations by supervisors and superintendents to ensure quality of classroom teaching.

Other supernumerary activities thrust upon teachers and schools have been minimized to gain class time and to focus on getting back to fundamentals and the restoration of a full calendar year of 206 school days.

For the classroom shortage, a study on using the physical plant of elementary and secondary schools all year long through a year-round schedule has been undertaken to enable the system to take in more students without new construction. Hopefully and ideally, an extra 25 percent more students can be taken in, since the school year will be for three quarters, enabling the use of the fourth quarter for additional classes on a staggered basis.

Finally, for science and mathematics, the

change calls for training a new generation of science and math teachers who will not only communicate well (in English) but who have the up-to-date scientific knowledge of what they are to communicate about in the world of science and mathematics. This means the restoration or establishment of laboratories for instructional purposes and adequate teaching materials. Several international programs are presently being implemented to take care of these, but the problem is that the programs are region- or province- specific, leaving other regions as yet without the necessary inputs. The Department of Science and Technology (DOST) has established a system of Philippine Science High Schools in Quezon City, Eastern Visayas, Western Visayas, and Mindanao. DECS has established 16 regional science high schools in SY 1997/98, some of them the same as those supported by DOST. In addition, the Third Elementary Education Program (TEEP), funded by the World Bank and the Overseas Economic Cooperation Fund of Japan, has a component in science teaching and improvement; so does the Science and Mathematics Education Manpower Development Project under the Japan International Cooperation Agency of Japan; the Philippine-Australia Project in Basic Education under Australia likewise has a science training component with equipment.

Plans

The perennial shortage of classrooms (21,000 at the end of school year 1997/98) and the increasing population as well as participation (close to 100 percent at the beginning primary level, 81.44 percent of Grade 6 graduates at the secondary level [SY 1996/97]) and the increasing survival rate (from 67.96 in 1997 to 68.76 in 1998 for elementary school graduates, from 73.38 in 1997 to 70.47 in 1998 for secondary school graduates) continue to put a strain on the system.

The annual appropriation for new classrooms under capital expenditures is expected to remain at the 2.5 billion pesos level which is

enough for only 5,000 classrooms (5,000 x P350,000, the cost of one classroom with a toilet on the side), since whatever is left is used for other physical facilities including sports, making the shortfall a continuing one, as in turn the cohorts of students in Grade 1 and in First Year High School keep increasing by 2.5 percent a year. If present trends continue, the 12 million-plus elementary students and 5 million-plus high school students in 1998 will reach 15 million at the elementary level and 7 million at the secondary level by the 2004, when the present administration finishes its term.

Obviously, something has to give.

As already mentioned, one solution is to introduce different versions of the year-round calendar so that the physical plant facilities of schools will be utilized if possible for 12 months instead of the present 9 months (2 weeks during the Christmas season and 10 weeks during the summer season). A feasibility study on using the year-round calendar (with period for cleaning up and making renovations) is presently underway, which will enable the individual schools to take in 20-25 percent more students since each student will be attending only three quarters, with some students 'on leave' during one semester and then re-enrolling for their three quarters per grade.

More immediately practicable is the recruitment of a construction firm or firms — with adequate capital resources provided by either GSIS, SSS or the Land Bank and possibly a development loan from world agencies such as the World Bank and the Asian Development Bank providing funds at lower rates — to erect schools which DECS will then use on a lease/purchase agreement or a build-operate-transfer basis with the capital allotment of DECS each year for amortizing loans (principal and interest) for school buildings instead of capitalizing buildings and classrooms on a limited year-to-year basis.

Again, a feasibility study is presently being prepared, for presentation to the International Cooperation Committee of the National Economic Development Authority in the immediate future.

At the end of secondary school (after only 10 years in public schools, 11-13 years in more affluent private schools), some students are really emotionally, intellectually, and socially immature for university studies. Through a careful testing of entrants, the Commission on Higher Education charged with the supervision of all tertiary level academic institutions is mulling the feasibility of a pre-university year (to brush up on skills in language and in mathematics) prior to the university. This is a concept that DECS concurs with, with the proviso that this is best done at the site of the college or university itself rather than at a high school.

There is likewise pressure on the part of local governments to open nursery schools, kindergarten, pre-schools, day-care centers (all pertaining to preschool education) at government expense. The financial implications of adding more years to the system at whatever level will be staggering, considering that these will be recurring costs. However, since psychologists have made a case for the years 2 to 6 as the peak periods of learning for *homo sapiens*, it does not make much sense for the elders of our society not to make full use of this peak period of learning to hasten skills and concepts training. The thrust therefore of the present administration is to make preschool experiences available through the establishment of these schools by local government boards, composed of local officials, parents, and citizens, with cooperation from DECS. Some of these preschools are actually operated by DECS on DECS premises; others are under the Local School Board in rented rooms, and still others by private entities which derive their operating income strictly from tuition or which receive a subsidy of P290 per pupil annually under our present tuition fee supplement scheme, the subsidy being paid by DECS from the funds from the sale of the bases. More important for the future will be the style of teaching and learning in these preschools and the necessary teaching techniques, procedures, and equipment to make this period as profitable as possible without making the period the start of the more lockstep and rigid curriculum of the grade

school type. This is where scholarship in child development, research, and a mindset ready to explore the new are needed to make sure that preschools do not become like other grade schools with their rigid system of grades, lockstep learning, and regimentation. What is needed in these early years is not regimentation but tender loving care and attention and active interaction with the child to stimulate the growth of his own mental processes.

Insofar as the Grade 1 to 10 sequence is concerned, the traditional, formal schooling obtaining at present, the plan is to return to fundamentals of good school management, namely, the supervisory practices of the past. The classroom visitation of supervisors and superintendents and principals and heads of departments has to be restored to bring quality back to classroom teaching. There will likewise be systematic use of evaluation instruments at predictable times, to be coordinated by the National Education Testing and Research Center (NETRC) at DECS. In addition to overseeing equivalency tests (for those outside the system and those coming from abroad), placement tests (for those who may skip some grades), and the end-of-the-year achievement test (National Elementary Assessment Test, NEAT, and the National Secondary Assessment Test, NSAT), there will be systematic evaluations of faculty (through classroom visitations), administrators (through questionnaires and performance reports) and institutions (through an accreditation process) that will be regularly carried out and for which incentives will be given for good performance on a yearly basis. End-of-the-year achievement tests, to be administered to all (not a sampling of) graduates will be used to assess not only individual student achievement and progress but by comparison to see how one school does compared to the rest and how school divisions, districts, and regions compare with each other, with the test results made public, as a form of quality control and encouragement for the schools to do better and as a way of giving incentives and targets to individual institutions to build themselves up.

Accompanying pre-evaluation of newcom-

ers, continuing evaluation of students (a yearly, summative evaluation at the end of a period of schooling (Grade 6 and Year 4) as well as systematic accreditation of schools, the key factor to improving achievement and going beyond the Grade 5 divide for satisfactory (achievement plateaus to about 50 percent attainment of syllabus objectives from Grade 6 on), will be the improvement of classroom instruction through provision of adequate classrooms, enough teachers for a 1:40 proportion, enough administrators and principals for individual schools; and an ideal 1:1 ratio of books per pupil per subject at all levels. Imaginative and creative teaching needs to be done by better trained teachers.

The key to the future will be the attraction of talented men and women to the teaching profession by socially re-engineering the profession to put it on a pedestal as it was before World War. This is basically a marketing task for which consultants and a marketing firm should be recruited for a nationwide campaign for the revaluation of teaching in Philippine society.

One incentive will be scholarships through twenty-one (21) teacher-training institutions which have been selected by the Teacher Education Council (a joint body of the Department of Education, Culture and Sports and the Commission on Higher Education) as centers of excellence and development. The TEC works closely with these institutions and CHED gives them an annual subsidy of P3 million for five years to develop their teacher training programs especially for content (with focus on English, mathematics and science since these are the problem areas). The other incentive is to guarantee jobs for these scholars (initially 840 [21 x 40] each year, subsequently several thousand), the sum to be funded by the CHED and by DECS itself through an increase of appropriations for faculty development.

For those already in the field, the National Education Academy of the Philippines (NEAP) under DECS has drafted a plan to have teachers and administrators at different levels undergo summer-long training sessions in content and

higher management skills, with those talented being able to complete their MATs after four summers. For the more research oriented teachers who will occupy positions of intellectual leadership in the future, the plan is to have them take a fourteen-month MA or MS program in selected graduate schools (initially in Manila, subsequently in other urban centers such as Baguio, Cebu, Davao, and Cagayan de Oro).

The most formidable task is coping with sheer numbers: there are 370,000 elementary schools teachers, 100,000 secondary school teachers. Secondary schools constitute the soft underbelly of the system and need the most help in academic uplift. Hence, the ambition of the present administration is to make sure that all of the 100,000 secondary school teachers undergo summer training in their fields of specialization, with the more able ones doing the four-summer sequence, and possibly 10,000 being able to do the MA and MS eventually.

Among the 370,000 elementary school teachers, the focus will be on Grades 5 and 6 teachers who need the most attention. Summer programs, four summer MATs, and a full-fourteen month master's degree for the candidates for master teachers are being planned.

Estimates of how much this retraining will cost are currently being made. An initial estimate indicates that the targets are attainable with a reallocation and reprioritizing of needs, to phase out or substantially reduce other programs without immediate impact on our priority programs and seeking a reasonable additional sum each year from Congress to carry out these teacher training programs. For the teacher-training institutions undergoing the new double-degree program or curricula on a pilot basis beginning in June 1999, we hope that the other teacher training institutions (21 in all as of 1997/98) will adopt the program once subjected to evaluation and revision so that by the first decade of the new century, there will be a totally revitalized teacher entering the system. ■

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