The Department of Education (DepEd) will start its implementation of the K to 12 this coming school year 2012–2013. Curriculum review and enhancement is ongoing yet the assessment to be used for the K to 12 is still parked as the focus is directed to the gradual implementation of the new curriculum. However, a curriculum and assessment framework for K to 12 has been presented by the SEAMEO INNOTECH on its K to 12 report in 2012. This paper will serve as a proposal guide in developing the learning assessment system for K to 12 in the Philippines given the recommendations in the areas of content, time frame, cost, and technology considerations.

Keywords: Assessment, Education, K to 12 curriculum

Developing a Learning Assessment System that Supports K to 12

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Education reform has been an issue for decades in the Philippines. In order to address the issues concerning education, the Department of Education (DepEd) is continuously developing solutions which will address to the current problems of education. Since 1925 (from the first survey of Paul Monroe), studies have been done to determine the problems and the possible solutions that can be done. These studies were formulated through the use of assessments. Magno (2010) in his article *A Brief History of educational Assessment in the Philippines* cited UNESCO Survey (1949) the report of the surveys gathered from a conference with educators an layman from private and public school all over the country. The following were the results: (1) There is a language problem, (2) There is a need to for more effective elementary education, (3) Lengthening of the elementary-secondary program from 10 to 12 years, (4) Need to give attention to adult education, (5) Greater emphasis on community school, (6) Conduct thorough surveys to serve as basis for long-range planning, (7) Further strengthening of the teacher education program, (8) Teacher income have not kept pace with the national income or cost of

living, (9) Delegation of administrative authority to provinces and chartered cities, (10) Decrease of national expenditures on education, (10) Advocated more financial support to schools from various sources. From the assessments done, one of the solutions which DepEd is trying to work out at present emerged as the implementation of the new curriculum which is the K to 12. We need to add two years to our basic education. Those who can afford to pay up to fourteen years of schooling before university. Thus, their children are getting into the best universities and the best jobs after graduation. I want at least 12 years for our public school children to give them an even chance at succeeding (President Benigno S. Aquino III).

Although there are ongoing activities in preparation for the K to 12 such as work of task force to detail the K to 12 implementation model, stakeholder consultations / summit, curriculum review and enhancement, financial study, teacher training, physical build-up of SHS, SHS student placement scheme, legislation, and K to 12 information education campaign (IEC), there is no discussion yet on the learning assessment system plan for K to 12 which not only can determine student's progress but also can serve as long-basis for long-range planning. Though there is already a framework presented by the SEAMEO INNOTECH.

Why Assessment is Important in K to 12?

The word, assess, dates back to the Medieval Latin word assidere, which means to sit by or attend (Scott Foresman, 1988). According to Nancy Sindelar (2011), attending to students' learning by using a variety of assessment strategies always has been a trademark of good teaching. Assessments show us what our students know before instruction begins, whether or not our students are understanding the lesson while it is being delivered, as well as what, if anything, our students have learned from the lesson (Sindelar, 2011, p. 3). From the definition of assessment earlier, one can derive that assessment is used to identify what is still needed by the students. Therefore, assessment can also be defined as the process of obtaining information that is used to make educational decisions about students, to give feedback to the student about his or her progress, strengths, and weaknesses, to judge instructional effectiveness and curricular adequacy, and to inform policy (AFT, NCME, NEA, 1990, p. 1). Applying the definition given would give the purpose of assessment for K to 12 which are (1) source educational decisions for K to 12, (2) feedback about the progress of students under the K to 12 along with its strengths and weaknesses, (3) judgment for instructional effectiveness and curricular adequacy of K to 12.

Studies from other countries about K to 12 assessments show the importance of K to 12 assessments in college placement. Kirst (2003) in his study *Using a K-12 Assessment for College Placement* depicted the problem of increasing remediation rates in California State University (CSU) which led to the questions concerning the quality of public schools and about K to 12 content standards and accompanying state tests developed by the California State Board of Education. CSU decided to adopt a K to 12 state assessment as its own placement test for first-year students which aim to provide clearer signals to high school students who have been uniformed about the discrepancy in standards between high school grades, tests, and CSU placement. In

the Philippines, there is indeed a need to have a different assessment for K to 12 in order to caution colleges and universities across the country as reflected in the previous study. This justifies that assessment is important to K to 12 to avoid remediation of students in colleges and universities.

The Proposed Curriculum and Assessment Framework for K to 12

The SEAMEO INNOTECH presented on its 2012 report the curriculum and assessment pathway which is also the framework for K to 12. The framework has no specific explanation from the report presented however formative and summative assessments can be embedded in the framework. Figure 1 shows the flow of the implementation of K to 12 and the idea on when assessments will take place.

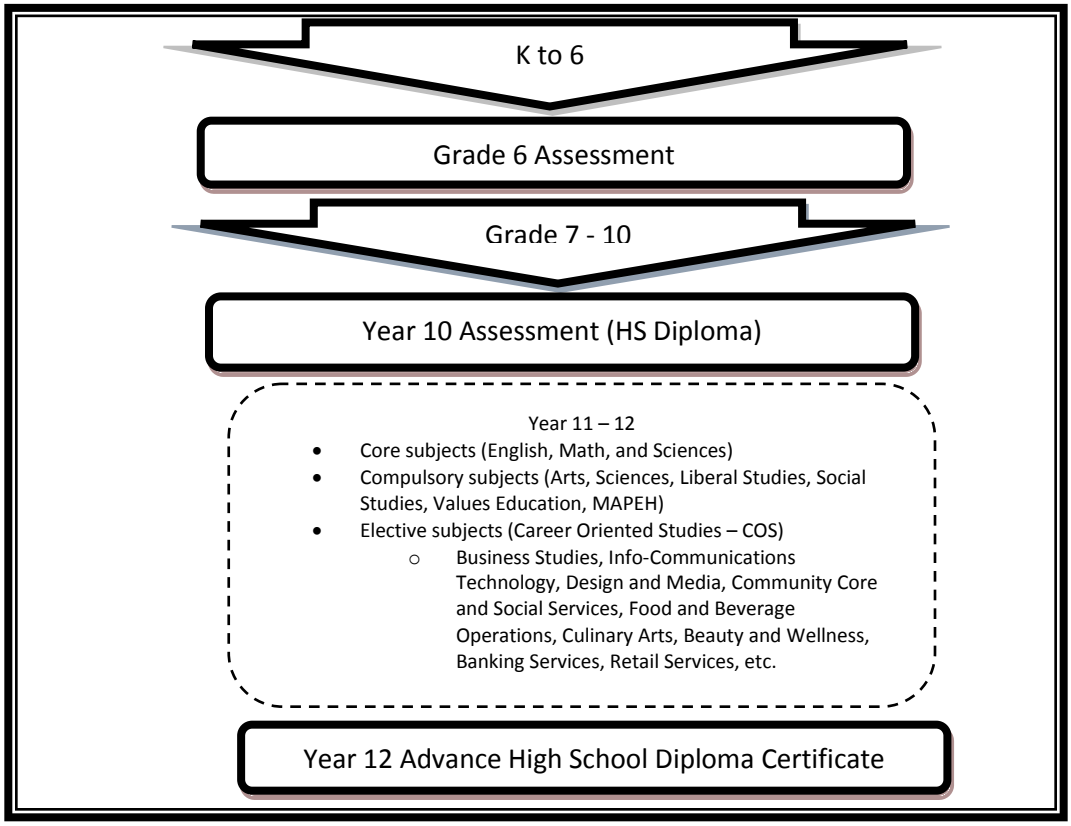

Figure 1. Curriculum and Assessment Pathways for K to 12 (SEAMEO INNOTECH, 2012)

In the framework, formative assessments can be done all throughout the K to 12 program while summative assessments can be done during the years 6, 10 and 12. This is in accordance with the recommendation to replace the old assessments and emphasize summative assessments with formative assessments to align with the K to 12 program. In this manner, national assessments will also be modified and assessments will include item types, including close type questions such as short

answer and multiple-choice; as well as open ended tasks that mirror the curriculum and its desired outcomes. Moreover, assessments will be aligned with standards referenced frameworks to define outcomes, to specify content to be learned, and to describe levels of achievement. This alignment will provide all stakeholders with clear indications concerning expectations of learning outcomes. For Mathematics and Science, assessment techniques and strategies will offer opportunity to assess skills in the sequence of the subject. Since the framework aligns the curriculum with the assessment, rubrics for assessment needs will be used to identify the kinds of learning outcomes and quality of learning expected of students as well as the needs of the curriculum. Exposure of criteria for performance-based assessment tasks to skill audits will ensure that tasks are realistic, well-specified, and measurable. Written performance-based assessment tasks in mathematics and science will mix both traditional and authentic assessment. The proposed plans mentioned will manifest the aim to build assessment strategies and associated analytical, reporting and dissemination process which is based from the recommendations of SEAMEO INNOTECH and AUSAID UniMelb integrated report.

Assessment for Math, English, and Science

The three core subjects which are Math, English, and Science should have a specified assessment to clarify the curriculum and assessment pathways. Although there were hints presented on how Math and Science should be assessed, the given hints are vague and broad. Moreover, the plan for English assessment is missing in the curriculum and assessment pathways framework. Below are suggestions on how core subjects should be assessed in coordination with the curriculum and assessment pathways framework:

In assessing Math, teachers should first conduct the needs assessment to students to determine the content of the curriculum and the assessment to be imposed. Researchers have shown, that both adults and children are able to undertake arithmetical calculations outside of school, employing a variety of approaches not taught in school, even though they are apparently unable to produce similar results when faced with school problems and are required to use school-taught algorithms (Scribner 1984; Nunes *et al*. 1993). It has also been shown, in several research studies, that children frequently fail to apply 'realistic' considerations when it is defined as 'appropriate' that they do so by test designers (Verschaffel *et al*. 1994). However, children, and especially those children who are less knowledgeable about the peculiar ways boundaries are drawn between school and everyday knowledge, will perhaps fail to demonstrate what they know and understand about mathematics as a result of drawing 'inappropriately', from the perspective of the test designers, on their 'everyday' knowledge of the world outside of the classroom (Cooper 1992, 1994b). Curriculum and assessment objectives should be aligned with the real world and should be in accordance with the cultural backgrounds and environment where the stakeholders are coming from. Likewise, assessment items should be realistic and culture based. Aside from the traditional tests in Math, journals should also be used as an alternative assessment in Math. Journals could help

students to document the concepts learned in Math and retain their interest in the subject. Betco and Reano (2011) conducted a research on assessing student's performance through journal writing. Respondents came from San Bartolome High School which is a public school and results show that retention of concepts last longer if students can do it on their own through writing. Furthermore, students were motivated to reflect their own works whether strengths or weaknesses for further improvements. 52% of the respondents strongly agree that Math is an interesting subject, 28.8% of the respondents agree that Math is an interesting subject and 19.2% of the respondents strongly disagree that Math is not an interesting subject.

To be able to realize the efficacy of the Math assessments, Niss (1999) identified eight Mathematical competencies which were used for the Danish KOM Project, a platform for the Danish Mathematics education reform. The eight Mathematical competencies were divided into two groups. The first group of competencies concerns the ability to ask and answer questions in and with Mathematics:

1. Thinking Mathematically (mastering Mathematical modes of thought) such as
    1.1. Posing questions that are characteristic of Mathematics, and knowing the kinds of answers (not necessarily the answers themselves or how to obtain them) that Mathematics may offer;
    1.2. Understanding and handling the scope and limitations of a given concept.
    1.3. Extending the scope of a concept by abstracting some of its properties; generalizing results to larger classes of objects;
    1.4. Distinguishing between different kinds of Mathematical statements (including conditioned assertions ('if-then'), quantifier laden statements, assumptions, definitions, theorems, conjectures, cases):
2. Posing and solving Mathematical problems such as
    2.1. Identifying, posing, and specifying different kinds of Mathematical problems – pure or applied; open-ended or closed;
    2.2. Solving different kinds of Mathematical problems (pure or applied, open-ended or closed), whether posed or by oneself, and, if appropriate, in different ways.
3. Modelling Mathematically (i.e. analyzing and building models) such as
    3.1. Analyzing foundations and properties of existing models, including assessing their range and validity
    3.2. Decoding existing models, i.e. translating and interpreting model elements in terms of the 'reality' modeled
    3.3. Performing active modeling in a given context (structuring the field, Mathematizing, working with(in) the model, including solving the problems it gives rise to, validating the model internally and externally, analyzing and criticizing the model in itself and vis-à-vis possible alternatives, communicating about the model and its results, and monitoring and controlling the entire modeling process.)
4. Reasoning Mathematically such as

4.1. Following and assessing chains of arguments, put forward by others
4.2. Knowing what a Mathematical proof is (not), and how it differs from other kinds of Mathematical reasoning, e.g. heuristics
4.3. Uncovering the basic ideas in a given line of argument (especially a proof), including distinguishing main lines from details, ideas from technicalities;
4.4. Devising formal and informal mathematical arguments, and transforming heuristic arguments to valid proofs, i.e. proving statements.

The other group of competencies concerns with the ability to deal with and manage Mathematical language and tools:

5. Representing Mathematical entities (objects and situations) such as
   5.1. Understanding and utilizing (decoding, interpreting, distinguishing between) different sorts of representations of Mathematical objects, phenomena and situations;
   5.2. Understanding and utilizing the relations between different representations of the same entity, including knowing about their relative strengths and limitations;
   5.3. Choosing and switching between representations.
6. Handling Mathematical symbols and formalisms such as
   6.1. Decoding and interpreting symbolic and formal Mathematical language, and understanding its relations to natural language;
   6.2. Understanding the nature and rules of formal Mathematical systems (both syntax and semantics);
   6.3. Translating from natural language to formal/symbolic language
   6.4. Handling and manipulating statements and expressions containing symbols and formulae.
7. Communicating in, with, and about Mathematics such as
   7.1. Understanding others' written, visual or oral 'texts', in a variety of linguistic registers, about matters having a Mathematical content;
   7.2. Expressing oneself, at different levels of theoretical and technical precision, in oral, visual or written form, about such matters.
8. Making use of aids and tools (IT included) such as
   8.1. Knowing the existence and properties of various tools and aids for Mathematical activity, and their range and limitations;
   8.2. Being able to reflectively use such as aids and tools.

Furthermore, the eight competencies "are to do with mental or physical processes, activities, and behaviors" (Niss, 1999, p.9).

In assessing Science, a Science assessment system can be applied which is aligned with the foundations of Science Assessment (NRC, 2001). There are three assessment foundations: (1) cognition, (2) Observation, (3) interpretation.

Cognition refers to the theories on how students learn. Research has suggested that the social-cultural constructivist approach to science teaching is most promising (Tobin, Tippins, & Gallard, 1994). Under the cognition, effective teaching should follow the following principles: (1) Teachers must draw out and work with the

preexisting understandings that their students bring with them. (2) Teachers must teach some subject matter in depth, providing many examples in which the same concept is at work and providing a firm foundation of factual knowledge. (3) The teaching of metacognitive skills should be intergraded into the curriculum in a variety of subject areas (Bransford et al., 2000). In addition, effective teaching takes place in the following learning environments: (1) Student centered: Schools and classrooms are organized around students. (2) Knowledge centered: Attention is given to what is taught, why it is taught, and what competence or mastery looks like. (3) Assessment centered: this consists of formative assessment-ongoing assessments designed to make students' thinking visible to both teachers and students – and summative assessment – assessments at the end of a learning unit to find out how well students have achieved the standards. (4) Community centered: Develop norms for the classroom and school as well as connections to the outside world that support core learning values (Bransford et al., 2000).

Observation refers to assessment tasks through which students' attainment of learning outcomes is elicited. In the observation assessment foundation, different assessment techniques are being applied in gathering the data. Observation may be considered as consisting of multiple dimensions. The following dimensions can be conceptualized: (1) The medium: Observation can be based on text, audio-video, graphic, and physical action. (2) The time: Observation can take place from instant responses to long-term responses ranging from days to months. (3) The agent: Observation can take place individually, in pairs and in groups. (4) The construct: Observation may involve the cognitive domain (i.e., knowledge, comprehension, application, analysis, evaluation, and creation), affective domain, and psychomotor domain. (5) The content: Observation may involve a single topic or multiple topics (Liu, 2010).

Interpretation refers to measurement models through which the assessment data are interpreted. Classical test theory (CTT) can be applied or used as a measurement model. The CTT has three basic aspects: validity, reliability, and absence of bias. Assessment validation may be based on content (the alignment between assessment coverage and the intended curriculum), relevant criteria (the correlation between assessment two sets of assessment data), and theoretical construct (the agreement with the hypothesized mental processes or products). Reliability may be established by internal consistency of assessment items or tasks and the stability of student assessment scores over time, across contexts, or among raters. Absence of bias may be established by documenting the immediate and long-term effects of assessment result uses (Liu, 2010).

After knowing the foundations, the next step should be selecting an approach to planning Science assessment. In order to plan for a science assessment, there should be an identified approach to plan for a science instruction. One popular approach for instructional planning is the backward design approach elaborated by Wiggins and McTighe (2005). There are three stages in backward design: Stage 1 is to define the desired results, stage 2 is to identify assessment evidence, and stage 3 is to plan learning activities. The advantage of backward design to planning science instruction and assessment is the correspondence of the assessment types to the

backward design. Diagnostic assessment, summative assessment, and formative assessment are relative to instructional context.

In assessing English, standards-based assessment reflecting communicative competence should be considered. The study of Plata (2010) entitled Standards and Assessment in the 2010 English Curriculum for High School: A Philippine Case Study aimed to analyze the alignment of standards in the 2010 English curriculum with the overall goal of the reform and to analyze the authenticity of the assessment tasks. The results showed that the content standards did not include important aspects of functional literacy such as learning strategies, reading/writing strategies, and other aspects of communicative competence. The teachers also felt that there should be standards that specify the use of language for academic and social purposes. Bautista, Bernardo, and Ocampo (2008) pointed out that:

> The key competency that should be targeted by all school systems is subsumed under the expanded definition of functional literacy. For example, the Organisation for Economic Co-operation and Development or OECD defines functional literacy as *"the capacity to access, integrate, evaluate and manage information and knowledge. It provides learners a window to the world and the linguistic, textual and symbolic tools to engage with the world as acting and autonomous individuals interacting with various groups…*on paper, the various DepED and CHED curricular statements make reference to such goals and aspirations. But what we find in these national curricula are still isolated bits of knowledge and skills which are clearly inadequate compared to the expanded concepts of functional literacy and transformational citizenship (p.69)

Standards-based instruction and assessment for English should enumerate clear goals or objectives for communicative and literacy competencies. Furthermore, authentic assessments which involves the direct examination of a student's ability to use knowledge to perform a task that is like what is encountered in real life or in real world (McMillan, 2001) should be applied for reading, listening, speaking, and writing competencies. Since authentic assessment can be bridged with performance assessment, students can plan, construct, and deliver an original response and explain or justify their work. Furthermore, students are aware of the criteria and standards by which the work will be judged before their work.

Recommendation

For the learning assessment system for K to 12 to be successful, content, time frame, cost, technology, etc. should be considered in the further development of the learning assessment system for K to 12.

Content consideration

Assessment should follow the data-driven instructional system for a more unified and realizable results based from what the curriculum offered. Sindelar (2011) formulated a data-driven instructional system which could be helpful in the development of the curriculum and assessment content. There are three steps to be

followed. Step one is to define the learning targets. This should answer the question what it is you want your students to know. In 2010, the Colorado Department of Education clarified Colorado's standards by defining "expectations" for each grade level. In the Philippine context of K to 12, there is already the "expectations" but specifically defining those expectations for each grade level, it would not be hard to produce a standards-based learning. Standardized implies some type of national (or, at least, statewide) norms (Hogan, 2007, p.245) which defines standards-based learning or education as requiring students to define their own learning based on a number of pre-determined standards (Parkhurst, 2010). During the 1990s, various national organizations have attempted to isolate the most important content to teach and the national content-delineation became part of the educational standards movement (Popham, 2008, p.106). According to Popham (2008) there are two types of educational standards: (1) content standard which describes the knowledge or skills that educators want students to learn (academic content standards) and performance standard which identifies the desired level of proficiency at which educators want a content standard mastered (student academic achievement standards). These two educational standards should be aligned with the learning targets. In developing learning targets, the following should be remembered: (1) A standards-based learning target may include more than one standard, (2) A standards-based learning target may include only part of a standard, (3) A standards-based learning target will focus on key skills, concepts, and facts that are critical to student success in future coursework and life, (4) A standards-based target is heavily assessed on a high-stakes summative test, (5) A standards-based learning target is formatively assessed as instruction progresses, (6) If you made all your state standards learning targets, the standard K to 12 would need to become a K-22 experience. (Marzano, Kendall, & Gaddy, 1999). Step two is to begin building your standards-based assessments. Standards-Based Assessments are high-stakes tests with close links to both the curriculum and the approved standards for learning. These tests are scored showing the extent to which the student reached the standard for achievement (Wright, 2008, p.390). By aligning your local formative and summative assessments to the newly defined learning targets and standards, one can start gathering test data that will begin to create a comprehensive picture of the students' progress toward learning targets. The following should be considered while building standards-based assessments: (1) After the standards-based learning targets are established, identify one or more formats for either the formative or summative criterion-referenced test (CRT) to create to assess student progress toward one or more standards-based targets or standards, (2) When the type of assessment has been determined, the team should agree on test items or the criteria for the project and the associated common rubric, (3) Pilot the new assessment with a class or a group of students to maximize alignment with the standards-based learning targets and check for poorly written items, (4) Analyze students answers by learning target or standard. (5) Set a meeting to study assessment results and identify action plans for curricular revision and areas for re-teaching and individual student remediation. Step three is to align the curriculum with the learning targets and assessments. A standards-based common curriculum nurtures equity in that it defines what all students are expected to know

and promotes achievement in that it allows to measure easily what students do and do not know. Figure 3 presents the cyclical and recursive process of creating a data-driven instructional system which could be adapted to the Philippine K to 12 learning assessment system.

If the cyclical and recursive process will be used in schools, assessments for the K to 12 can be done locally or provincially. Furthermore, applying the process could guarantee the reliability, validity, fairness, and appropriateness of the assessment since it will be aligned with the mother-tongue medium which is one of the considerations of K to 12.

Time frame consideration

Assessment should be aligned with the schematic time frame of implementing the K to 12. Managing the time for developing and implementing the new learning assessment system for K to 12 will lessen the hassle in preparing for the curriculum as well. Underpinning the time frame with the gradual implementation time frame of K to 12 would help teachers and students to prepare ahead for the summative assessments for K to 12. Data-driven instructional system should be followed at the early stage of implementation. Figure 4 shows the proposed schematic time frame for the implementation of the learning assessment system for K to 12 following the data-driven instructional system.

The blocks highlighted in dark grey shows the pilot implementation which is the initial stage. In this gradual stage, teachers are initially following the three steps. However, the blocks highlighted in light grey shows the full implementation in the adaptation of the new learning assessment system based from the K to 12. In the full implementation stage, data-driven instructional system is being used at the levels highlighted in green. Teachers are already going back to step one and to repeat the cyclical and recursive system.

Cost consideration

Assessment should have the source of funding for operation. For the revising and implementation to take effect, financial need should be addressed properly to the government through the Department of Education (DepEd). Although the budget for education increased compared from the previous years, there is no clear budget allocation for the improvement of curriculum and assessment. Based from the *Proposal for Basic Education Budget for 2012*, the proposed budget for basic education includes the following allocations: (1) basic educational facilities including construction and repair of classrooms, school desks and chairs; construction of water and sanitation facilities, (2) hiring more teachers to address current teacher shortage, (3) procurement of textbooks and teacher's manuals, (4) support the expansion of Government Assistance to Students and Teachers in Private Education (GASTPE) to benefit one million grantees in 2012, and (5) for the universal kindergarten program to benefit 1.7 million five-year old children served by the public school sector. The proposed budget for basic education clearly indicates that most of the allocations are

for the needs of the teachers and students and neglecting the essential of education which is the curriculum and assessment. Although textbooks and manuals which are materials to implement the curriculum will be funded by the government, the assurance of the quality of these textbooks cannot be guaranteed since textbooks should align with the curriculum and assessment. To address the issue of funding of assessment for the new learning assessment system, the Department of Education should revise the proposal for the basic education for the following year by allocating a portion for curriculum and assessment development which includes research and implementation. Since there is no clear allocated budget at present, funding should come from other non-government education organizations (e.i. UNESCO) in order to sustain the learning assessment system implementation for the public sector. Private corporations like Center for Educational Measurement (CEM) and Asian Psychological Services and Assessment Corporation (APSA) can cope with the cost problem since private sector can get assistance from the Fund for Assistance to Private Education (FAPE). The use of technology which will be dwelled at the latter part of the paper is an underlying consideration of the cost of assessment since there is a mandatory need to benchmark the new learning assessment system with the international assessments. The higher quality of technology to be used, the higher would be the cost of the assessment resources. If the government will invest to a high quality technology which can be aligned with the learning assessment system plan, the system would be a long term investment, nevertheless, it will prevent from spending frequently to purchase new technology for the replacement of the defective ones. Underlying also in this consideration is the modification of assessments making it more specific for each province/state in the Philippines. Since the medium of instruction is set to mother-tongue, multilingual, there is a need to produce assessments which is suited for the particular dialect or mother-tongue. This will lead to spend more in producing resources. Lastly, persons involved with the assessment will be affected also by the costing of the assessment. Increase will be a demand since the creation of the new assessment entails more work. However, considering the economic condition of the nation, wise decisions for funding is still the best way to allocate funds for assessment resources.

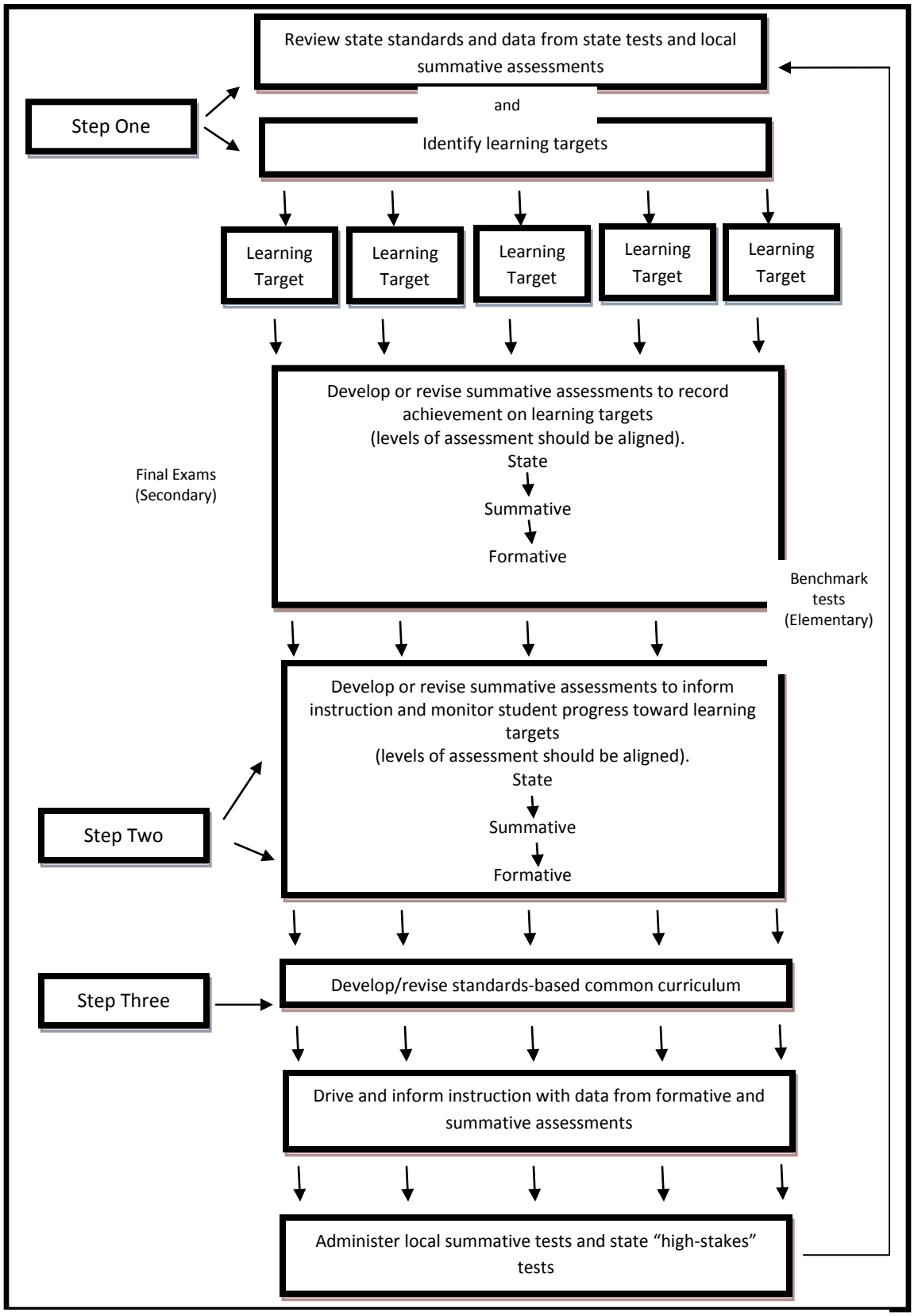

Figure 3. Creating a Data-Driven Instructional System: A Cyclical and Recursive Process

Year 0 2011-2012	Year 1 2012-2013	Year 2 2013-2014	Year 3 2014-2015	Year 4 2016-2017	Year 5 2017-2018	Target/Deal
					Grade 12	2 Years Senior HS
					Grade 11	
4th Year HS					Grade 10	2 years Senior HS
3rd Year HS					Grade 9	
2nd Year HS	Old Curriculum				Grade 8	
1st Year HS	New Curriculum				Grade 7	
Grade 6					Grade 6	6 Years Elementary
Grade 5					Grade 5	
Grade 4					Grade 4	
Grade 3					Grade 3	
Grade 2	Old Curriculum				Grade 2	
Grade 1	New Curriculum				Grade 1	
Kindergarten						Kindergarten

Figure 4. Schematic Time Frame for the New Learning Assessment System

Legend: Pilot implementation Full implementation

Technology consideration

Assessment should be aided by technology both performance-based and content based assessments. There is the necessity to purchase a technology infrastructure that would be a key instrument in the administration, scoring, data collection, and score reporting for both on-demand exams and the curriculum embedded performance task components. This technology platform would significantly reduce the financial and human resource burdens of implementing and maintaining the system as required by psychometric standards. The technology would be used to: (1) deliver both on-demand and curriculum-embedded assessments to students and teachers, (2) use adaptive computer technology not only to deliver tests electronically but also to create assessments that are responsive to the test taker's performance and allow better measurement of growth, (3) deliver online tasks of higher-order of abilities, allowing students to engage in online simulations, (4) score selected items, (5) deliver the responses on other items or tasks to trained scorers/teachers to assess from an electronic platform, (6) support training and calibration of scorers and moderation of scores, (7) enable efficient aggregation of results in ways that support reporting and research about the responses. This

technology would revolutionize the learning assessment system which is possible through the help of the private sectors. Technologies that are capable of automated scoring are being used in assessment instruments by private sectors in the Philippines. This is the reason why it is not impossible for the Philippines to adopt such technology though it may entail a larger cost in acquiring resources for the learning assessment system. Since the K to 12 aims to emphasize 21st century skills, technology for assessment should also be aligned with the 21st century curriculum brought by the K to 12.

Conclusion

K to 12 curriculum for the Philippines is all set but the debate for an effective assessment that would support the K to 12 curriculum is another issue which is yet to brew as further researches emerge. The main goal at the end of writing this paper which would serve as a guide proposal for developing the K to 12 learning assessment system is to answer the question of what we should want from our assessment system. Recommendations were focused to the content, time frame, cost, and technology considerations because these are the possible debates that would arise as K to 12 implements its way to Philippine education. Furthermore, these recommendations are set to answer what we want for the assessment to be. However, further research should still be done in order to supplement the lack of debates for the K to 12 assessments. The development of K to 12 assessments in the Philippines should not stop from proposals but it should continue progressing through thorough research.

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