Integrating the Critical Aspects of Formative Assessments in Philippine High School

William B. Ongsitco
Maynilad Cultural Foundation

This paper critiques the educational system in high schools based on the achievement test scores of the Filipino high school students in standardized tests and based on their performance relative to the performance of those in other countries. Data were gathered from the government sectors, particularly the Department of Education (DepEd), and from private agencies. The results show that the performance of the Filipino high school students continues to be unsatisfactory for years. Flawed assessment strategies were identified as among the possible reasons why the academic performance of our students remain low and why their achievement test scores are not on par with those of the students in other countries. The critical aspects of formative assessment elaborated by Cauley and McMillan (2010) are presented and discussed in the light of the needs our Filipino high school students. Formative assessment is recommended as one possible solution to the problems confronting Philippine educational system.

Keyword: formative assessment, Philippine High Schools, student assessment

The conceptualization and subsequent implementation of the K+12 received commendation from many sectors of the country. One of the arguments put forward in favor of the K plus 12 program is that our curriculum does not allow students to acquire sufficient mastery of the subjects offered, and that the lessons are so much compressed in such a short period of time, i.e., 10 years (Discussion Paper on the Enhanced K+12 Basic Education Program, 2010). However, while such reasoning may be plausible, no extensive research whatsoever has been carried out in our country to prove that argument. On the other hand, there has been ample evidence that strategies employed by our teachers may directly impact the academic performance of the students (Halcon, 2008; Avila & Baetiong, 2012). Embedded in the concept of excellent teaching is excellent learning assessment (Plata, 2010). While all teachers maybe

assessing their students in different ways, it is worthwhile to make a distinction between what constitutes effective learning assessment, from those that are not. This paper thus, attempts to explicate the different ways teachers measure the academic performance of the students, and elaborate when these methods could be employed with maximum benefits for the learners.

With the K plus 12 program now in our midst, and teachers are receiving instructions about how to go about the proposed curriculum, this may be the propitious time to likewise train teachers on the diverse and effective ways of assessing students for maximum learning in and outside the classrooms.

A Theoretical Concept of Assessment

Stiggins (2008) observe that "assessment may be the most powerful tool available to us for ensuring universal student mastery of essential standards." While possibly no research yet has proven that assessment is indeed what teachers truly need to help students reach demanding academic goals, sound reasoning can bring us to the conclusion that no challenging academic goals can be achieved without the assistance of effective learning assessments. Stiggins (2008) may have stated a critical pedagogical principle.

It is worth discussing now, which types of assessments bring about genuine learning on the part of the students. Teachers are familiar with the two types of assessments I intend to take up in this paper. The first is what we call summative assessments, and the other one, is what we call formative assessments. These two types of learning assessments have entirely different functions. It is crucial that teachers understand these differences so that they would know which type of assessment to be used in the different educational contexts they find themselves in.

Summative Assessments

This type of assessment is primarily utilized for judging a student's level of specific educational constructs (e.g., mathematical or verbal abilities). Among the practical uses of this type of assessment is determining the grade, or evaluating whether a student should be or not be promoted to the next grade or year level. For example, an algebra teacher may give a quiz after each lesson. If the teacher moves to the next lesson after each quiz, then the quiz is being used as a summative assessment tool, i.e., the teacher's sole intent on giving the quiz is identify the level of understanding and comprehension of each student on the lesson just taken up.

Another example of summative assessment is the standardized achievement tests some schools administer to students towards the end of a school year. This test serves the purpose of grade or year level placement. A student will either be promoted to the next grade or year level or retained in the same level, depending on the results of the achievement tests. Summative tests are therefore called assessment of learning.

Formative Assessments

In contrast to summative assessment, formative assessment is likewise called assessment for learning (Clark, 2008). This is because the main function of formative assessments is to help stakeholders acquire knowledge, which could inform academic instructional methodologies (Stiggins, 2008). Hence, in this paradigm, teachers administer quizzes not simply to identify the grade a student should receive, but rather, to examine areas in a lesson, which are grasped well, and facets, which may need to be retaught. In this context, the teacher is making his assessment inform the manner by which lessons are to be taken up with the learners (Clark, 2008).

Formative Assessment in Philippine High Schools

Academic Performance of Second Year High School Students

Philippines has not been fairing well in international academic studies. In 2003, our second year high school students joined the Trends in International Mathematics and Science Study (TIMSS) (Mullis, Martin, Gonzalez, & Chrostowski, 2004). In mathematics for 2nd year high school group, there were 38 participating countries and we ranked 34th; for science, there were 46 participating countries and our 2nd year students ranked 43rd (Mullis et al., 2004).

In 2008, Filipino students from Science High Schools joined the math event of the Trends in International Mathematics and Science Study (TIMSS-Advanced). This was participated in by ten countries. These were Armenia, Islamic Republic of Iran, Italy, Lebanon, Netherlands, Norway, Philippines, Russian Federation, Slovenia and Sweden (Mullis, Martin, Robitaille, & Foy, 2009). At the end of the event, the Philippines ranked the lowest among the participating nations (Mullis et al., 2009).

The performance of our second year high school students-both from private and public schools-in the National Achievement Tests (NAT), has not been satisfactory as well in the last five school years. The table 1 from DepEd shows the results of the National Achievement Tests (NAT) in the last five school years (SY). These results show the percentage of correct answers in the NAT. From the SY 2006-2007 to SY 2010-2011, none among the subjects listed show percentage scores in a consistent upward trend. The highest percentage we have is that of Filipino in the SY 2010-2011 (58.93%). The lowest is mathematics in the SY 2008-2009 (38.03%). Mathematics does not have any percentage score higher than 42.85%. For science, the highest score obtained is 46.71%. For English, the highest percentage of correct answers is 53.46%.

There could be several or manifold variables at work in the Philippine educational system that brings about low academic performance among our high school students. Truly, it would be overly simplistic to state that if we address the issue of assessment for learning, significant improvement would take place in the academic performance of our students. It is highly plausible that several factors are operating in our educational system, that putting order in one, may not necessarily yield a favorable result in our students' academic performance. Nonetheless, we have

to start somewhere if we wish to ameliorate the dismal performance of our students. And working on our formative assessment may offer a great deal of promise.

Table 1
Department of Education Fact Sheet 2011.

	SY 06-07	SY 07-08	SY 08-09	SY 09-10	SY 10-11
Achievement Rate (MPS)*	**46.64%**	**49.26%**	**46.71%**	**45.56%**	**47.93%**
Mathematics	39.05%	42.85%	38.03%	39.64%	42.00%
Science	41.99%	46.71%	42.11%	43.80%	39.35%
English	51.78%	53.46%	52.90%	46.95%	46.45%
Filipino	48.89%	47.64%	51.05%	58.08%	58.93%
Araling Panlipunan	51.48%	55.63%	49.44%	39.32%	52.03%

*Mean Percentage Score (MPS) indicates the ratio between the number of correctly answered items and the total number of test questions or the percentage of correctly answered items in a test.

Reports on Assessment in the Philippines

DepEd has outlined the formative assessment that teachers have to carry out in high schools so as to achieve the desired academic goals. DepEd order No. 33 of 2004 stressed the significant role of formative assessment in the academic life of the students; they enjoined teachers to regularly monitor student progress so as to identify ways of achieving the standards set; learning deficiencies and gaps are supposed to be treated as issues of great concern (World Data on Education, 2011).

Learning gaps and deficiencies in the academic life of high school students is a common concern of teachers. Students may find it extremely difficult to advance on account of learning gaps. It is critical thus, that these learning gaps are identified through some forms of formative assessments, and scaffolding be applied as soon as possible. This will enable the students to catch up on time with the others who do not have any learning deficiencies.

The Bureau of Secondary Education of DepEd, conducted case studies of twenty high schools. These high schools included public, technical-vocational, science, and private high schools. The group discovered that except for a few Science High Schools, most of the teachers in these schools simply repeated what were in the textbooks and that most of their learning goals were repeating what were mentioned in the class (2010 Secondary Education Curriculum, 2011). Likewise, they discovered that students were not encouraged to think and decide on their own, but rather, management is often characterized as “prescriptive and directive” (2010 Secondary Education Curriculum, 2011). Moreover, they reported that assessment is not geared towards meeting the standards, but rather, on simply identifying whether or not a student has learned the lesson (2010 Secondary Education Curriculum, 2011).

Reporting on the way the teachers taught in the classrooms, they mentioned that while BEC encourages the development of creativity, critical thinking, and problem solving skills among the students, teachers simply focused on lower order thinking skills such as simple recall; encouraging students in explicating and

elaborating analyzed concepts were seldom observed (2010 Secondary Education Curriculum, 2011).

A Culture of Formative Assessment: A Needed Solution for our Academic Travails

As we have seen earlier, assessment for learning is crucial if we wish our students to achieve the academic standards we set for them. While we do not establish empirically in this paper the causal link between the assessment practices of high school teachers and the unsatisfactory performance of our students, something that educational researchers are invited to embark, we can strongly argue that a link probably exist. The report by the Bureau of Secondary Education on the teaching and assessment practices of selected high school teachers and the fact sheets released by DepEd on the dismal performance of second year high school students can be argued as causal. Students primarily depend on their teachers for their academic growth. Hence the productive and unproductive practices of school teachers will eventually impact on the motivation and academic growth of the students.

It is in this light that I propose the following.

Considering that we are in an important phase in the history of Philippine education, i.e., the crafting of K to 12 curriculum and its implementation, I would like to suggest that DepEd renews its commitment in assisting schools develop a culture of formative assessment. This culture would enable teachers to regularly assess students not for simple labeling of what they know, but rather, to discover latent academic difficulties some students may be undergoing, and to apply the most opportune remedies.

To develop a culture of formative assessment, each teacher should be able to live a commitment to assess for learning. What follows now are Cauley and McMillan's (2010) critical aspects of formative assessment. I incorporated ideas which I think may be especially helpful to teachers and students in the Philippine setting. Knowledge and application of these theories can be one solution to the manifold problems educators and academic stakeholders often bemoan.

Students should be made aware of the specific objectives of the course.

Teachers should point out, from the very outset, the specific learning objectives that students should work on during a certain period of time (Cauley & McMillan, 2010). Moreover, these objectives should be reiterated during the course of the learning activities, so that students do not veer away from making the effort to acquire the targeted knowledge and skills. If the target goal is a certain output, teachers should provide models to students as to how an exemplary work looks like (Cauley & McMillan, 2010). Since high school students often need clear instructions on how to go about doing academic projects, showing models and pointing out important details in the project will do the high school students so much good. This is especially important in our country where students are often hesitant to ask questions or clarify points about a project. By showing them examples, students capture many project details that they may miss if models were absent.

In a writing class for instance, a teacher may show the class two or three examples of a well written essay. He may enumerate the different characteristics of a good essay and point how these characteristics are embedded in the models. A Math teacher would not be satisfied enumerating the steps in solving algebra word problems. He would actually solve problems on the board so that students would see in action how these steps are done in specific problems. He may also call out volunteers to solve problems on the board so that students may become aware of the difficulties they may encounter as they go about solving algebraic problems. Therefore, if we require students to produce outputs, we should feel obliged to show them models of exemplary outputs.

Inform students where they are as regards the objectives of the course.

A score is a feedback teachers give students whenever they return graded test papers. However, such a feedback does not tell students the critical areas they have to work on or skills they need to acquire (Cauley & McMillan, 2010). Hence, qualitative feedback should be given the students on a regular basis, to allow the process to become progressive and acquire responsiveness (Bell and Cowie, 2000). Generally, this feedback either commends areas of a student's work that show the accomplishment of some learning goals, or points out some specific aspects of his work that requires improvement. The latter is especially needed by students who have not yet acquired the ability to assess their work. They need their teachers to direct their attention to sections of their work, which need revision. It is almost certain that if these roadblocks were not shown to the students, these errors would be repeated again in the future. Hence, for example, instead of a teacher saying, "You are a great artist," the teacher may say, "The colors are very appropriate to the objects and your use of perspective does create the illusion of depth. You have accomplished our learning goal!" On the other hand, a Physics teacher who noticed several mistakes in the test paper of his student, would not simply write the student's score, but rather, he may write something like, "Your solutions are all correct, however, your final answers are all wrong because you committed mistakes in the summation part of the final step. Avoid carelessness when you do the addition." In the first example, the teacher gives specific recognition that a learning goal has been accomplished. Such information can help students achieve more learning goals in the future. In the second example, the teacher directly informs the student what obstructs him from accomplishing a learning goal. In both cases, the teachers are helping the students keep their eyes on the learning goals.

Help students assess their academic progress.

Assessment for learning is a shared responsibility, primarily between the teacher and the student (Stiggins, 2008). Teachers have the dual obligation to assess students with a goal of enhancing his learning, and to coach students on how to assess their own learning and the learning of their peers. Teachers often desire that students leave the schools as life-long learners, i.e., individuals who endlessly crave for useful knowledge and skills. However, to be expert learners, students should also be expert in self-assessment. Only individuals, who are capable of knowing what they know and what they do not know, can aspire for that which they know not yet.

Formative assessment can thus be utilized in helping students be on top of their own learning (Carreira, 2012). Teachers should therefore help students get into the habit of reflecting on their own learning. Educational psychologists call this metacognition. Through metacognition, students likewise discover strategies they could use to be effective in their studies. They also eventually learn to drop habits that are roadblocks to academic success.

Cauley and McMillan (2010) mentions that students should learn how to objectively examine their performance and identify the knowledge and skills they still need to acquire, in relation to the school's academic goals. Concomitant to inculcating this skill of self-examination is the development of critical thinking skills (Plata, 2010). Students receive countless information everyday from diverse sources. Some of this information is beneficial to his academic life. On the other hand, a great number of information coming from outside him may even jeopardize his ability for sound reasoning. It is of great importance then that students are taught how to distinguish what is helpful from what is not helpful to his normal functioning as a learning individual. This is another area where teacher's help is needed.

The importance of objectivity in self-assessment comes into light especially when students experience some academic failures. For example, questions like, "Am I to be blamed for failing this exam, or is it somebody else's fault?" may require battling against our tendency to be self-biased. This objective critical analysis ought to pervade the different facets of academic and non-academic life of the students.

Teach students the skill of regular academic goal setting.

When teachers give specific feedback to students about their work, students acquire knowledge on what academic goals they may set for themselves (Cauley & McMillan, 2010). At times, however, students may need actual coaching on how to set academic objectives for themselves. In our country, it is worth keeping in mind that goal setting is not simply for students who are academically challenged. Rather, it is likewise for those who are the so-called achievers. Academic achievers may be contented of getting high scores without really making the effort to go deeper into their lessons. In this case, making an emphasis on mastery goal orientation can spur gifted students to acquire a mastery level of the targeted knowledge and skills.

Feedback should also be given to students as regards the content of their goals, and how they try to achieve their goals. By giving them timely feedback on their goal-setting and goal-achieving related activities, students are supplied with strategies that they could eventually employ even in the absence of our help.

Conclusion

The present situation of our educational system poses challenges to researchers, teachers, and concerned citizens of our country. One thing is certain. Filipinos cannot give up in the midst of troubles that beset us. And besides, there are numerous promising solutions that are backed by empirical support. While it may be

true that cultural differences may not allow one solution to work in another country, adjustments can be done and researchers could launch themselves to work and examine under what conditions certain strategies may work in a particular setting. Considering that formative assessment is very much appealing to sound reasoning, we invite researchers and teachers in our country to study how our students can maximize the benefits they can derive from formative assessment. We also encourage school administrators to take seriously the training of teachers on assessment (Stiggins, 1995). If we do all we can to arm teachers with the sorely needed skills of assessment, and assist them in casting away fear of assessment, which many teachers undergo (Stiggins, 1995), we will be doing so much good, not only to the teachers and students, but to all our countrymen as well.

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