

ASSESSMENT PRACTICES OF GRADE 6 MATHEMATICS TEACHERS

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Abstract: This study determined the assessment practices of the Grade 6 Mathematics teachers in San Clemente District, Schools Division Office of Tarlac Province during the school year 2023-2024. It used descriptive-developmental method of research. Likewise, documentary analysis will be done to gather some data. Developmental in the sense that it developed sample types of test items in Mathematics. The study found out that Grade 6 Mathematics teachers are professionally qualified with master's degree or higher, with a minimum teaching experience and with relevant in-service training in Mathematics. Generally, the Grade 6 Mathematics teachers employ assessment practices that have something to do with the use of test administration, analysis and interpretation as well as the use of test results. There is no significant difference between the assessment practices of the Grades 6 Mathematics teachers in terms of the testing concerns. Sample types of test items in Mathematics were developed for assessment purposes. The study recommended that the Grade 6 Mathematics teachers should attend in-service training like seminars, workshops, conferences and others to upgrade themselves on test construction, administration of test and interpretation of test results, and uses of test results. Frequency of test administration, types of test items administered, analysis and interpretation of test results should be given emphasis by the Grade 6 Mathematics teachers. Evaluation of assessment practices of the Grade 6 Mathematics teachers should be presented to the district supervisor to help improve the skills of the teachers in terms of test construction, administration of test and interpretation of test results, and uses of test results through in-service training.

Keywords: assessment, Mathematics, Grade 6

INTRODUCTION

Providing feedbacks on the effectiveness or ineffectiveness of the teaching-learning process is the most important function of any test. Dressel (2009) argued that an examination, in the best sense, informs students and teachers of their mutual progress." In other words, it tells the student how well he has mastered the course content, in turn, informs the teacher what he has, and has not learned. With student achievement information on hand, teachers can play ways by which testing can be made more effective so that learning will result from it. Achievement test informs both the teacher and the student on his/her current level of performance. It provides diagnostic information that can be used for planning further and/or remedial instruction. By considering the results of several tests, a measure can be obtained of his/her progress and improvement.

Recent years have seen increased research on classroom assessment as an essential aspect of effective teaching and learning (Bryant, 2008). It is becoming more and more evident that classroom assessment is an integral component of the teaching and learning process (Gipps, 2010).

Bargasa (2008) stressed that an achievement test directs students to the

most important material to be learned. It motivates students to learn and master the materials they think they will be covered by a test. Examinations and grading are linked to one another. Tests are graded and test scores play a significant role in determining the student's mark. Achievement test can be used to certify that students have attained a level of competence in an area (e.g. test taken to acquire a driver's license, trade tests, exams for professional licenses in fields such as law, medicine, teaching, etc. They can also be used for placement purposes. Placement tests are used to demonstrate that you have the background knowledge sufficient for enrolment in an advanced course. They can also be used for student certification. Minimum competency tests are used to certify high school graduation. A measure of learning like an achievement test is one piece of evidence needed to evaluate the effectiveness of instruction. It can be used to evaluate the instructor since the goal of instruction is to make students learn. If a teacher's job is to help students learn, and the students do not learn, the teachers has failed in his job.

Educational measurement and testing programs teach people how to use tools that help measure student progress and learning. Students learn how to choose and implement a form of assessment and interpret its results. They also learn how to analyze and report test data. Educational testing is very important now. Governments at all levels and in all states are mandating achievement tests for students. Voters are demanding them as evidence that young people are learning and that schools are doing their jobs. Also,

more careers than ever before require testing for licensure. At the same time, testing organizations are under a lot of pressure to maintain high standards of test quality. The type of tests a teacher gives determines the type of studying his students will do and the kinds of learning they will achieve (Barsaga, 2008).

Hopkins (2008) stressed that testing and learning complement each other. There can be no learning without evaluating through the use of tests. Students should be helped to understand the purpose of test. They should become interested in evaluating their own progress. Research has shown that, when rightly used, testing can be valuable learning experience. Students should realize that the purpose of testing is learning that they do not learn for the purpose of passing tests. Both teachers and students should be interested in measurement in terms of its contribution to learning, which will be made if tests are planned to complement learning.

The National Council of Teachers of Mathematics (NCTM, 2000) regards assessment as a tool for learning Mathematics. The NCTM contends that effective Mathematics teaching requires understanding what students know and need to know. According to Roberts (2000) assessment informs the teacher about what students think and about how they think. Classroom assessment helps teachers to establish what students already know and what they need to learn. Ampiah (2003) contend that a teacher needs to know what children are able to do or not if he/she is to plan effectively.

Tyler (2007) insisted that a test was effective only if it measured progress toward achievement of all teaching goals. Thus, testing must be linked to the broader and deeper outcomes of learning.

The teachers play a vital role in the teaching-learning process. He uses information obtained through measurement as the basis for preparation and presentation of learning experiences. Information about students' abilities and past achievements enables the teacher to start at the level of his students and adapt the presentation of their particular capacities. During the learning experience, such information enables the teacher to check on the progress of his students ad modify his teaching accordingly. At the end of a unit or learning, information gained through measurement aid him to evaluate students' achievement and forms the basis for assigning the marks which are such an integral part of education today. Such information gives the teacher not only a basis for evaluating students' achievement but also standard to gauge his own effectiveness (Smith, 2006).

Kelly (2006) adds that the school administrator, likewise, has a role play. He is faced with a large number of problems many of which can be solved better if he possesses adequate quantitative information about the students. "Do we need ability grouping in the school?" How shall students be selected for various ability groups?" These questions pertaining to the curriculum can be answered if the principal has objectively collected quantitative information to guide him.

Assessment is often focused on determining knowledge. However, there is more to being a competent health professional or scientist than having sound theoretical knowledge. Students and trainees must also demonstrate that they can apply their knowledge, ultimately being able to perform appropriately without supervision in the workplace. It is ability at this final stage that is most difficult to measure. Assessments that primarily test knowledge (example: examinations) are of limited value in predicting what a graduate will do as an independent practitioner. Students will also have to work with patients in a variety of settings. It may, therefore, be appropriate to teach students about appropriate attitudes and to assess students in this area.

Students may, therefore, be assessed about: what they know (cognitive domain); skills they have learned (psychomotor domain) and attitudes that they have been taught. (affective domain). It is important to assess students at the appropriate level. For example, if the learning outcomes for a course specify that students will be able to recall basic facts then the assessment must test their ability to recall basic facts. As a second example, if the learning outcomes for a course specify that students will be able to expertly perform a clinical skill, then the assessment must test expert ability.

Knowledge of the different levels of learning in the three domains can help to ensure that assessment test students at the appropriate level i.e. assessment fits with levels of learning specified in the learning outcomes.

According to Furst (2006), a test evaluates the work that has been done. The teacher will be delighted if he finds his students scored high in the test. It also enables the teacher to accumulate experiences and follow-up test results. The improvement of teaching and it is fully important and just as necessary as educational diagnosis.

Zimbarbo (2007) reiterated that test result would also have a value to the students. They will know definitely what is expected of their how progressive they are and with what the degree of success be measured up as compared to the standard of the school achievement.

Assessment is designed so that students understand their progress towards course goals and modify their behavior in order to meet those goals. In order to do that, assessment should be ongoing. In other words, classes that use one or two exams a term are not using assessment as effectively as it could be used. In order for students to gain a true representation of their understanding, frequent assessment is critical, and it should be accompanied with feedback.

Assessments can be scored by hand, by computer, or by combination of both. Many online assessment programs and apps can score quantitative items, like multiple choice, drag and drops, and fill-in-the-blanks, and other item types that have specific correct answers. Items like performance assessments and essays are still left for teachers or human-scorers to assess.

Reliability and validity of testing are two things that are considered when assessments are adopted. Reliability refers to the likeliness of the scores and outcomes to be repeated in several different populations of test takers. Validity refers to how the assessment outcomes are interpreted and applied. The goal of standardized testing is to be fair and impartial; however, whether or not this goal is actually realized in today's assessments is controversial, as it's nearly impossible for one test to be fair to all student populations.

Assessment Resources

There are tons of great assessment resources and ideas online. Let's take a look at how each type of assessment can be assisted with technology. We'll also explore some more unique ways to monitor your students' understanding and progress.

Diagnostic Assessment

Diagnostic assessments assess strengths, weakness, and prior knowledge. Understanding how much a student already knows about a topic is vital for effective differentiation in the classroom. Some students may already be experts in a given topic, while others may be missing foundational skills that are key to mastery. Many teachers use the same diagnostic assessment as a formative or summative assessment later into the unit to compare a student's score at the beginning, middle, and end of instruction. Diagnostic assessment lets teachers pinpoint a student's preconceptions of a topic, helping teacher's anchor further

instruction on what students have already mastered. Additionally, this kind of assessment helps teachers provide instruction to skills that need more work. The APA has a great article on the importance of diagnostic assessment.

Formative Assessment

Formative assessment monitors student performance and progress during learning. This type of learning is often low-stakes and ungraded. It's used as a way for the teacher to see if the student is making progress toward the end goal of mastering the skill. Teachers use formative assessment techniques to monitor student learning so that they can provide feedback or help along the way. Both diagnostic and summative assessments can be used as formative assessment.

Summative Assessment

Summative assessments are design to measure student achievement at

end of instruction. These types of assessments evaluate student learning at the end of a project, unit, course, or school year. Summative assessment scores are usually recorded and factored into student academic record in the form of letter grades and scores from tests like SAT or ACT.

Classroom assessments that serve as meaningful sources of information don't surprise students. Instead, these assessments reflect the concepts and skills that the teacher emphasized in class, along with the teacher's clear criteria for judging students' performance. These concepts, skills, and criteria align with the teacher's instructional activities and, ideally, with state or district standards. Students see these assessments as fair measures of important learning goals. Teachers facilitate learning by providing students with important feedback on their learning progress and by helping them identify learning problems (Bloom, Madaus, & Hastings, Stiggins, 2002).

Critics sometimes contend that this approach means "teaching to the test." But the crucial issue is, What determines the content and methods of teaching? If the test is the primary determinant of what teachers teach and how they teach it, then we are indeed "teaching to the test." But if desired learning goals are the foundation of students' instructional experiences, then assessments of student learning are simply extensions of those same goals. Instead of "teaching to the test," teachers are more accurately "testing what they teach." If a concept or skill is important enough to assess, then it should be important enough to teach. And if it is not important enough to teach, then there's little justification for assessing it.

The best classroom assessments also serve as meaningful sources of information for teachers, helping them identify what they taught well and what they need to work on. Gathering this vital information does not require a sophisticated statistical analysis of assessment results. Teachers need only make a simple tally of how many students missed each assessment item or failed to meet a specific criterion. State assessments sometimes provide similar item-by-item information, but concerns about item security and the cost of developing new items each year usually make assessment developers reluctant to offer such detailed information. Once teachers have made specific tallies, they can pay special attention to the trouble spots—those items or criteria missed by large numbers of students in the class.

In reviewing these results, the teacher must first consider the quality of the item or criterion. Perhaps the question is ambiguously worded or the criterion is unclear. Perhaps students mis-interpreted the question. Whatever the case, teachers must determine whether these items adequately address the knowledge, understanding, or skill that they were intended to measure.

If teachers find no obvious problems with the item or criterion, then they must turn their attention to their teaching. When as many as half the students in a class answer a clear question incorrectly or fail to meet a particular criterion, it's not a student learning problem—it's a teaching problem. Whatever teaching strategy was used, whatever examples were employed, or whatever explanation was offered, it simply didn't work.

Ronquillo (2007) in her study attempted to compare the performance of Grade Six boys in Elementary Mathematics as a result of the frequency of testing. She found out that the students evaluated by a maximal evaluation program obtained significantly higher achievement than students in the medial evaluation program. However, no significant difference was found between the performance of the medial evaluation group and minimal evaluation group.

Cruz (2003) examined teachers' understanding of assessment, their practices in assessing student learning and their use of assessment data to guide their teaching. Specifically, this study sought to determine if level of training had an impact on teachers' understanding of assessment, teachers' practices in assessing student learning, or teachers' use of assessment data to guide their teaching. The overarching research focus was to find out whether teachers with more training had a greater and more positive understanding of assessment, whether they assessed their students more frequently and appropriately and whether they reported more frequent use of assessment data in guiding their teaching than those teachers with less training. The results of the study showed a significant difference in understanding between teachers who had an associate's degree in primary education and teachers who had no training. Data driven decision-making provided the framework to explain the teachers' assessment practices and use of student assessment data. Among the key finding of this study was that differences were not found in teachers' practices for assessing students' learning nor use of assessment data to guide teaching regardless of the teachers' level of training, gender, age, or teaching experience. The mean understanding score for the entire group fell in the range of good understanding of assessment. The group with an associate's degree reported the highest mean score for all three areas compared with all the other groups. The highest qualified groups who had master's degrees in education or bachelor's degrees in primary education, had the highest mean scores for all three areas indicating that they had the least understanding of assessment, had the least positive assessment practices, and the least effective use of assessment data. It is recommended that an associate's degree in primary education be the minimum requirement for entry in the teaching profession. Professional development sessions should be conducted for teaching staff to enhance their assessment skills and their knowledge of assessment, and for enhancing their assessment practices and use of data to guide their teaching. Students should be involved in the formative assessment process as their input is critical for increasing academic achievement.

Statement of the Problem

This study determined the assessment practices of the Grade 6 Mathematics teachers in San Clemente District, Schools Division Office of Tarlac Province during the school year 2023-2024.

Specifically, it sought to answer the following sub-problems:

- 1. What is the profile of the Grade 6 Mathematics teachers in terms of the following:
 - a. Highest educational attainment;

- b. No. of years of teaching;
- c. Relevant in-service training attended in Mathematics.
- 2. What are the assessment practices of the Grade 6 Mathematics teachers in terms of:
 - a. Frequency of test administration
 - b. Types of test items administered
 - c. Analysis and interpretation of test results
 - d. Uses of test results?
- 3. Is there a significant difference between the assessment practices of the Grade 6 Mathematics teachers in terms of the aforecited concerns?
- 4. Based on the findings, what recommendations can be proposed to enhance the use of acceptable assessment practices in the teaching of Grade 6 Mathematics?

METHODOLOGY

This chapter presents the method and procedure employed to answer the research problems identified in the study. More specifically, it discusses the research design, sources of data, instrumentation and data collection and tools for data analysis.

Research Design

The study used descriptive-developmental method of research. Likewise, documentary analysis was done to gather some data.

The researcher used descriptive-developmental method of research because she believes that it is the best method of research that suits the purpose of the study. This method enabled the researcher to determine the assessment practices of the Grade 6 Mathematics teachers in San Clemente District, Schools Division Office of Tarlac Province during the school year 2023-2024.

Developmental in the sense that it developed sample types of test items in Mathematics.

Sources of Data

The respondents of this study will be the 45 Grade 6 Mathematics teachers from San Clemente District, Schools Division Office of Tarlac Province during the school year 2023-2024.

Instrumentation and Data Collection

In pursuing the problems raised, evaluated made use of the questionnaire-checklist as an instrument in gathering data. The questionnaire was based on the researcher's readings of related studies for the purpose of the study. In like manner, analysis of documents possessed by teachers like tests and test results were considered by the writer in order to have real picture of the practices traditionally done by teachers.

The first part of the questionnaire focused on the profile of the Grade 6 Mathematics teachers in terms highest educational attainment, no. of years of teaching, relevant in-service training attended.

The second part of the questionnaire was the assessment practices of the Grade 6 Mathematics teachers in terms of frequency of test administration; types of test items administered; analysis and interpretation of test results; uses of test results.

The items in the questionnaire were formulated by the researcher and were validated by five (5) experts. Suggestions were incorporated in the final draft of the questionnaire.

A formal written permission to conduct the study and to float the questionnaire was secured from the Schools Division Superintendent of Tarlac Province.

The researcher personally sought the assistance of the Grade 6 Mathematics teachers for the administration of the questionnaire. After one week, the researcher retrieved the questionnaire from the teachers.

Tools for Data Analysis

In this study, the researcher used the following statistical measures to analyze the data for the problems.

To answer sub-problem 1, the professional profile of the Grade 6Mathematics teachers, was answered using frequency counts and percentages.

To answer sub- problem 2, the weighted arithmetic mean or average weighted mean was used to determine the assessment practices of the Grades 6 Mathematics teachers. A Likert type rating scale will be sued. Each category has its own descriptive equivalent and corresponding arbitrary weight as follows:

| Point Value | Limits | Descriptive Equivalents |
|-------------|-------------|--------------------------------|
| 5 | 4.21 - 5.00 | Always |
| 4 | 3.41 - 4.20 | Frequent/Often |
| 3 | 2.61 - 3.40 | Occasional |
| 2 | 1.81 - 2.60 | Seldom |
| 1 | 1.00 - 1.80 | Never |

To answer sub-problem 3, t-test was used.

RESULTS AND DISCUSSION

This chapter deals in the presentation, analysis and interpretation of the data gathered relative to sub-problems in the study.

I. Profile of the Grade 6 Mathematics Teachers

Table 1a. Highest Educational Attainment

| Highest Educational Attainment | Frequency | Percentage |
|---------------------------------------|-----------|------------|
| MAEd/MEd/MS | 16 | 36 |
| With M.A/MEd Units | 29 | 64 |

| Total | 45 | 100 |
|-------|----|-----|
| Total | 43 | 100 |

It is reflected in Table 1a that most of the respondents have masteral units with 29 or 64%. There are also 16 or 36% who already finished their masteral degree.

It can be observed from the data that there are more teachers who are pursuing graduate studies than those who are not enrolled in the graduate school because of the increase in salary that goes alongside the promotion as teachers.

Table 1b. No. of Years of Teaching

| No. of Years of Teaching Mathematics | Frequency | Percentage |
|--------------------------------------|-----------|------------|
| 0-5 years | 6 | 13 |
| 6-10 years | 21 | 47 |
| 11-15 years | 18 | 40 |
| Total | 45 | 100 |

As shown in able 1b, 21 out of 45 respondents have been teaching for 6-10 years, 6 or 13% have been teaching for 0-5 years, and 18 or 40% have been teaching for 11-15 years. In the study of Setlhomo (2007), teachers were unsure about the adequacy of their assessment training, but indicated that they needed further training in assessment. The results also showed hat primary teachers, particularly those with only a certificate needed more skill training in assessment applications, statistical applications, and criterion-referenced testing. The more experienced teachers were, the more they agreed with mastery and performance orientations, and the more they had perceived skill and use of desirable classroom assessment practices.

Table 1c. Relevant In-Service Training Attended in Mathematics

| Relevant In-Service training in attended | Frequency | Percentage |
|--|-----------|------------|
| National National | 16 | 36 |
| Regional | 34 | 76 |
| Division | 45 | 100 |

^{*}Multiple Responses

Table shows that all Grade 6 Mathematics teachers attended division level seminars. There are also 34 or 76% who have attendance in the regional level and the 16 or 36% have attended national seminars. As cited by Golla & De Guzman (2008), conclusive evidences from studies have pointed to the teacher as a single causal factor in determining the quality of education in schools. In addition, a study of Soriano (2011) tells that through teacher's training, it can strengthen the skills and values of teachers.

II. Assessment Practices of the Grade 6 Mathematics Teachers

Table 2a. Frequency of Test Administration

| Kinds of Tests | WM | DE | |
|--------------------------------|------|----|--|
| Formative Test (Daily Quizzes) | 4.10 | O | |
| 2. Weekly Test | 4.03 | O | |
| 3. Unit Test | 3.34 | Oc | |
| 4. Chapter Test | 3.21 | Oc | |
| 5. Semestral Test | 2.78 | Oc | |
| 6. Achievement Test | 3.31 | Oc | |
| 7. Periodical Test | 4.56 | A | |
| WM | 3.62 | 0 | |
| Legend: | | | |

| Point Value | Limits | Descriptive Equivalents |
|--------------------|-------------|--------------------------------|
| 5 | 4.21 - 5.00 | Always (A) |
| 4 | 3.41 - 4.20 | Often (O) |
| 3 | 2.61 - 3.40 | Occasional (Oc) |
| 2 | 1.81 - 2.60 | Seldom (S) |
| 1 | 1.00 - 1.80 | Never (N) |

Table 2.a shows the assessment practices of the Grade 6 Mathematics teachers in terms of frequency of test administration of the different kinds of test. It can be seen from the result that Grade 6 Mathematics teachers always administered periodical test with 4.56 mean. On the other hand, formative test (daily quizzes) and weekly test are often administered with 4.10 and 4.03 mean, respectively. While they occasionally administered unit test, chapter test, semestral test and achievement test with 3.34, 3.21, 2.78, and 3.31 mean, respectively. Ohlsen (2007) emphasized in a survey of secondary teachers, the teachers self-reported their use of classroom assessment methods. The classroom assessment picture depicted is one of continued reliance on traditional assessments such as quizzes, and major examinations as the main determinant of student grades.

Table 2b. Types of Test Administered

| Types of Test Administered | DE | WM |
|--------------------------------------|------|----|
| 1. Multiple Choice Items | 3.30 | Oc |
| 2. Short Answer/Completion Type | 2.89 | Oc |
| 3. Alternative Response (true/false) | 2.78 | Oc |
| 4. Matching Type | 2.86 | Oc |
| 5. Essay | 1.78 | R |
| 6. Analogy | 1.56 | R |
| 7. Problems Solving | 4.87 | A |
| 8. Mathematical Questions | 4.65 | A |
| AWM | 3.09 | Oc |

Legend:

| Point Value | Limits | Descriptive Equivalents |
|-------------|-------------|--------------------------------|
| 5 | 4.21 - 5.00 | Always (A) |
| 4 | 3.41 - 4.20 | Often (O) |
| 3 | 2.61 - 3.40 | Occasional (Oc) |
| 2 | 1.81 - 2.60 | Seldom (S) |
| 1 | 1.00 - 1.80 | Never (N) |

Table 2.b shows the assessment practices of the Grade 6 Mathematics teachers in terms of types of test items administered. It can be seen in the table that Grade teachers always administer problem solving and mathematical questions. It can be noted that occasionally teachers administer multiple choice items, short answer/completion type, true or false alternative response, matching type test items. However they rarely administer essay type questions and analogy.

Table 2c. Analysis and Interpretation of Test Results

| Analysis and Interpretation of Test Results | WM | DE |
|--|------|----|
| 1. Looks for patterns of error (Diagnostical Interpretation). | 3.48 | 0 |
| 2. Compares test scores with the unknown norm groups (Norm-Referenced). | 3.21 | Oc |
| 3. Compares test scores with the performance criterion set (Criterion-Referenced) | 3.45 | 0 |
| 4. Ranks test scores and give the relative standing of each learners with respect to the | 4.19 | 0 |
| whole class. | | |
| 5. Analyzes test in terms of reliability. | 3.78 | 0 |
| 6. Analyzes test in terms of validity. | 3.72 | 0 |
| 7. Computes for the Mean. | 3.74 | 0 |
| 8. Computes for the Median. | 3.59 | 0 |
| 9. Computes for the Mode. | 3.67 | 0 |
| 10.Appraises the discrimination power of the test. | 3.45 | 0 |
| 11. Tells the number of standard deviation units a raw score is from the mean. | 3.51 | 0 |
| 12. Compares raw score with Percentile Rank. | 2.67 | Oc |
| 13. Compares raw score with the School Ability Index (SAI) equivalents which | 2.45 | Oc |
| corresponds to the age of the learners. | | |
| 14. Uses rubrics for assessment. | 3.54 | О |
| WM | 3.46 | 0 |

Legend:

| Point Value | Limits | Descriptive Equivalents |
|-------------|-------------|-------------------------|
| 5 | 4.21 - 5.00 | Always (A) |
| 4 | 3.41 - 4.20 | Often (O) |
| 3 | 2.61 - 3.40 | Occasional (Oc) |
| 2 | 1.81 - 2.60 | Seldom (S) |
| 1 | 1.00 - 1.80 | Never (N) |

Table 3c shows the assessment practices of the Grade 6 Mathematics teachers in terms of analysis and interpretation of test results.

It can be gleaned from the presentation of data that Grade 6 Mathematics teachers occasionally analyze and interpret test results as reflected in the average weighted mean of 3.46. They occasionally compare test scores with the unknown norm groups (Norm-Referenced) with 3.21 mean; compares raw score with Percentile Rank with 2.67 mean; compare raw score with the School Ability Index (SAI) equivalents which corresponds to the age of the pupils with 2.45 mean. It is also reflected in the table that they often look for patterns of error (Diagnostical Interpretation); compare test scores with the performance criterion set (Criterion-Referenced); rank test scores and give the relative standing of each pupil with respect to the whole class; analyze test in terms of reliability; analyze test in terms of validity; compute for the mean; compute for the median; compute for the Mode; appraise the discrimination power of the test; tell the number of standard deviation units a raw score is from the mean; use rubrics for assessment.

Table 2d. Uses of Test Results

| Uses of Test Results | WM | DE |
|---|------|----|
| 1. Using assessment results when planning teaching. | 3.81 | 0 |
| 2. Using assessment results when making decisions (e.g. placement, promotion) | 3.78 | О |
| about individual learners. | | |
| 3. Using assessment results when evaluating class improvement. | 4.10 | О |
| 4. Providing oral feedback to learners. | 4.06 | О |
| 5. Providing written feedback to learners. | 3.89 | О |
| 6. Using assessment results when evaluating school improvement. | 3.98 | О |
| 7. Communicating classroom assessment results to learners. | 4.04 | О |
| 8. Communicating classroom assessment results to parents. | 3.89 | О |
| 9. Protecting learners' confidentiality with regard to test scores. | 3.78 | О |
| 10. Recognizing unethical, illegal, or otherwise inappropriate uses of assessment | 4.00 | O |
| information. | | |
| AWM | 3.53 | 0 |

Legend:

ivalents

| Point Value | Limits | Descriptive Equ |
|-------------|-------------|--------------------------|
| 5 | 4.21 - 5.00 | Alw <mark>ays</mark> (A) |
| 4 | 3.41 - 4.20 | Often (O) |
| 3 | 2.61 - 3.40 | Occasional (Oc) |
| 2 | 1.81 - 2.60 | Seldom (S) |
| 1 | 1.00 - 1.80 | Never (N) |

It is reflected in Table 2d that Grade 6 Mathematics teachers oftentimes use test results as indicated in the average weighted mean of 3.53. They often use assessment results when planning teaching, when making decisions (e.g. placement, promotion) about individual learners, when evaluating class improvement, providing oral feedback to pupils, providing written feedback to pupils, when evaluating school improvement, communicating classroom assessment results to pupils, communicating classroom assessment results to parents, protecting pupils' confidentiality with regard to test scores, recognizing unethical, illegal, or otherwise inappropriate uses of assessment information.

III. Significant Difference Between the Assessment Practices of the Grade 6 Mathematics Teachers

Table 3a. Significant Difference Between the Assessment Practices of the Grade 6 Mathematics Teachers in Terms of Frequency of the Test Administration

| Kinds of Tests | Computed T- | Tabular | Remarks |
|-----------------------------------|-------------|---------|-----------|
| International | Test Value | Value | MILCO OIL |
| Formative Test (Daily Quizzes) | 0.09 | 2.04 | Not Sig. |
| 2. Weekly Test | 0.145 | 2.04 | Not Sig. |
| 3. Unit Test | 0.5 | 2.04 | Not Sig. |
| 4. Chapter Test | 0.292 | 2.04 | Not Sig. |
| 5. Semestral Test | 0.303 | 2.04 | Not Sig. |
| 6. Achievement Test | 0.226 | 2.04 | Not Sig. |
| 7. P <mark>eri</mark> odical Test | 0.163 | 2.04 | Not Sig. |
| Average | 0.165 | 2.04 | Not Sig. |
| | | | |

Table 3a shows that there is no significant difference between the Grade 6 Mathematics teachers in terms of Frequency of Test Administration. The computed T-test values for each item is less than the tabular value at .05 level of significance.

Mc Millan (2001) studied the actual classroom assessment and grading practices of secondary school teachers in relation to specific class and determined whether meaningful relationships existed between teacher's assessment practices, grade level, subject matter, and ability levels of students.

Table 3b. Significant Difference Between the Assessment Practices of the Grade 6 Mathematics Teachers in Terms of Types of Test Administered

| of types of test fluministered | | | |
|-----------------------------------|-------------|---------|----------|
| Types of Test Administered | Computed T- | Tabular | Remarks |
| | test Value | Value | |
| Multiple Choice Items | 0.004 | 2.04 | Not Sig |
| Short Answer/Completion Type | 0.377 | 2.04 | Not Sig. |
| Alternative Response (true/false) | 0.025 | 2.04 | Not Sig. |
| Matching Type | 0.017 | 2.04 | Not Sig. |
| Essay | 0.433 | 2.04 | Not Sig |
| Analogy | 0.098 | 2.04 | Not Sig. |
| Problems Solving | 0.144 | 2.04 | Not Sig. |

| Mathematical Questions | 0.317 | 2.04 | Not Sig. |
|------------------------|-------|------|----------|
| Average | 0.320 | 2.04 | Not Sig. |

Table 3b shows that there is no significant difference between the Grade 6 Mathematics teachers in terms of Types of Test Administered. The computed T-test values for each item is less than the tabular value at .05 level of significance.

Of interest also is the study conducted by Mertler (2008). The study was designed to examine assessment practices of teachers in Ohio. The specific aim of the study was to gain an understanding of the extent to which teachers use traditional versus alternative forms of assessment techniques in their classrooms. Multiple resources of assessment will involve different ways of presenting tasks to students as well as different ways of probing assessment information so that valid inferences about students' progress can be made.

Table 3c. Significant Difference Between the Assessment Practices of the Grade 6 Mathematics Teachers in Terms of Analysis and Interpretation of Test Results

| Analysis and Interpretation of Test Results | Computed T–test Value | Tabular Value | Remarks |
|--|--------------------------|------------------|----------|
| Looks for patterns of error (Diagnostical Interpretation). | 0.366 | 2.04 | Not Sig. |
| Compares test scores with the unknown norm groups (Norm-Referenced). | 0.363 | 2.04 | Not Sig. |
| 3. Compares test scores with the performance criterion set (Criterion-Referenced) | 0.249 | 2.04 | Not Sig. |
| 4. Ranks test scores and give the relative standing of each pupil with respect to the whole class. | 0.262 | 2.04 | Not Sig. |
| 5. Analyzes test in terms of reliability. | 0.187 | 2.04 | Not Sig. |
| 6. Analyzes test in terms of validity. | 0.266 | 2.04 | Not Sig. |
| 7. Computes for the Mean. | 0.324 | 2.04 | Not Sig. |
| 8. Computes for the Median. | 0.500 | 2.04 | Not Sig. |
| 9. Computes for the Mode. | 0.369 | 2.04 | Not Sig. |
| 10. Appraises the discrimination power of the test. | 0.378 | 2.04 | Not Sig. |
| 11. Tells the number of standard deviation units a raw score is from the mean. | 0.433 | 2.04 | Not Sig. |
| 12. Compares raw score with Percentile Rank. | 0.441 | 2.04 | Not Sig. |
| 13. Compares raw score with the School Ability Index (SAI) equivalents which corresponds to the age of the pupils. | 0.437 | 2.04 | Not Sig. |
| 14. Uses rubrics for assessment. | 0.437 | 2.04 | Not Sig. |
| Average | 0.313 | 2.04 | Not Sig. |

The computed T-test values for each item is less than the tabular value at .05 level of significance. Mertler (2008) found no significant difference between teachers in urban, sub-urban, or rural schools with respect to their analysis and use of traditional assessments.

Just like school setting, Mertler found no significant difference in assessment practice by gender. Similarly, no significant differences were found between teachers based on their years if teaching experience with respect to their use of traditional assessment.

Table 3d. Significant Difference Between the Assessment Practices of the Grade 6 Mathematics Teachers in Terms of Uses of Test Results

| Uses of Test Results | Computed T-test Value | Tabular Value | Remarks |
|--|--------------------------|------------------|----------|
| Using assessment results when planning teaching. | 0.32 | 2.04 | Not Sig. |
| 2. Using assessment results when making decisions (e.g. placement, promotion) about individual learners. | 0,089 | 2.04 | Not Sig. |
| 3. Using assessment results when evaluating class improvement. | 0.273 | 2.04 | Not Sig. |
| 4. Providing oral feedback to learners. | 0.07 | 2.04 | Not Sig. |
| 5. Providing written feedback to learners. | 0.205 | 2.04 | Not Sig. |
| 6. Using assessment results when evaluating school improvement. | 0.115 | 2.04 | Not Sig. |
| 7. Communicating classroom assessment results to learners. | 0.327 | 2.04 | Not Sig. |
| 8. Communicating classroom assessment results to parents. | 0.416 | 2.04 | Not Sig. |
| 9. Protecting learners' confidentiality with regard to test scores. | 0.431 | 2.04 | Not Sig. |
| 10. Recognizing unethical, illegal, or otherwise inappropriate uses of assessment information. | 0.046 | 2.04 | Not Sig. |
| Average | 0.008 | 2.04 | Not Sig. |

Table 3d shows that there is no significant difference between the Grade 6 Mathematics in terms of Uses of Test Results. The computed T-test values for each item are less than the tabular value at .05 level of significance.

Similarly, Banda (2007) investigated teachers' perceptions of classroom assessment in Mathematics and their current classroom assessments practices. He found out that the extent o which teachers use different classroom assessment methods has no significant relationship with the assessments practices of other schools. This study found no significant differences among teachers at different school levels and at different levels of teaching experience with respect to their assessment practices, and evaluate their teaching methods. In addition, just over half of the teachers also noted that they sometimes used assessment results to assign extra homework or to group of learners. These results indicate that the teachers surveyed do use the results.

Recommendations

On the basis of the findings of this study and the conclusions drawn, the following are hereby recommended:

- 1. The Grades 6 Mathematics teachers should attend in-service training like seminars, workshops, conferences and others to upgrade themselves on test construction, administration of test and interpretation of test results, and uses of test results.
- 2. Frequency of test administration, types of test items adminstered, analysis and interpretation of test results should be given emphasis by the Grade 6 Mathematics teachers.
- 3. Evaluation of assessment practices of the Grade 6 Mathematics teachers should be presented to the district supervisor to help improve the skills of the teachers in terms of test construction, administration of test and interpretation of test results, and uses of test results through in-service training.

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