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## TEACHERS' WRITTEN EXAMINATION ASSESSED BY STUDENTS (TWEAST)

### ABSTRACT

*The study focused on the testing practices of the teachers in the tertiary level of the College of Teacher Education of Benguet State University. Specifically, it aimed to determine the extent to which the principles and guidelines in paper and pencil tests are observed by teachers; determine the association between the teachers' testing practices and their profile in terms of highest educational attainment, length of service, nature of assignment, and number of preparations; determine the extent to which identified factors affect the teachers' practices in testing; and determine the relationship between the identified factors that affect the teachers' testing practices and their profile, namely: highest educational attainment, length of service, nature of assignment, and number of preparations.*

*The study involved 22 teachers who are handling professional education subjects and 884 students in the junior and senior levels who have completed the course Educational Tests, Measurement and Evaluation. Survey questionnaires were administered to both teacher- and student-respondents; the one for the students was designed based on the principles of test construction.*

*Findings show that the teachers of the College of Teacher Education generally practice the general principles and guidelines in testing. They also observe the specific guidelines in test construction, specifically in completion, enumeration, labeling, analogy, rearrangement, and essay tests. However, principles in the construction of alternate response, multiple choice and matching tests are sometimes followed. Proper test administration practices are always observed by the teachers of the College of*

*Teacher Education.*

*Teachers' length of service, number of preparations, and nature of work have a significant inverse relationship with their testing practices. This means that the higher the number of years in service is, the lower the observance of the testing principles. Similarly, greater number of preparations means that the principles of testing are practiced less. Likewise, full time teachers have a tendency to observe the testing principles less.*

*On the other hand, the teachers' highest educational attainment does not affect the teachers' testing practices at all. The identified factors have a slight positive influence over the teachers' testing practices.*

*The teachers' length of service is directly correlated with the influence of the factors on their testing practices. Thus, greater number of years in teaching means more positive viewpoint on the influence of the factors. Meanwhile, the teachers' highest educational attainment, nature of work, and number of preparations is inversely correlated with the effect of the pre-identified factors over their testing practices. This means that teachers who have post-baccalaureate degrees and greater number of preparations are apt to view the elements of test preparation negatively while teachers with administrative work have more positive viewpoint towards these factors.*

## INTRODUCTION

Testing is one inevitable and integral part of the professional task of every teacher. Testing, according to Elliot *et al* (2000), is simply one procedure through which we obtain evidence about a student's learning or behavior. There are several ways by which we test our students and the most popular and traditional are the teacher-made or achievement tests, the observation of performance and the production of sample techniques. Of recently, experts have proposed several other means like the portfolio, the use of rubrics and other informal means in order to arrive at a comprehensive and fair assessment about the learning of students. High stakes testing, according to Kubiszyn and Borich (2000), refers to the use of tests and assessment to make decisions that are of prominent educational, financial or social impact. Specifically, tests provide the bases for awarding grades, the promotion or retention of a student, whether to award salary increase or promote a teacher for being an effective one, or for the state to take grant

accredited status to a school or not, to revise a curriculum or totally scrap its offering. This is why they refer to the procedure as high stake testing.

In general, testing aims to ascertain the extent to which the educational goals were met and vis-a-vis, gives a feedback about the effectiveness of the teacher. To be useful in decision-making (that is to give the overall evaluation), tests and other measurement procedures therefore have to be valid and reliable.

In the tertiary level, there is rather a profound use of written tests, both the objective and essay type. The objective test types intend to determine how well students know, comprehend as well as apply the basic and specific concepts, principles or facts, whereas the essay questions intend to examine their critical thinking and judgment, ability to organize and express their ideas, and unique styles of thinking.

Experts and school administrators tend to believe that some significant number of teachers either have not been properly trained or have not been at all trained in testing and assessment; while some say they believe that testing and evaluation are peripheral to the instructional process (Kubiszyn and Borich, 2000). It is for this one reason that this study was undertaken.

On the other hand, the social, economic and moral obligation of educational institution to provide quality education to its consumers has spawned the need to go for accreditation. To stay competitive, tertiary educational centers have to comply with CHED and state requirements. During the accreditation of the College of Teacher Education for Level II status, among the recommendations was focused on the teachers' test. Challenge was posed on showing that the written tests were comprehensive, valid and reliable, as well as proof of item analysis.

Considering the foregoing intentions, this study was undertaken to find out how well tertiary level teachers in the College of Teacher Education prepare and administer their tests. Specifically, it checked if the principles and guidelines in paper and pencil (written) tests construction are observed. In a twist of role, their respective students will assess them along this teachers' task. It is expected that from the findings, improvements in the high stakes decision-making will be more objective, fair and well deserved.

## METHODOLOGY

### Location

This action research was conducted at the College of Teacher Education particularly in the tertiary level. The study was carried out from August 2005 to September 2006.

### Respondents

There were two groups of respondents in this study: the students and the faculty in the tertiary level.

All faculty in the tertiary level who are directly involved in the construction of test were the respondents in this study. Certain variables about them were involved like their highest educational attainment, length of service, the nature of their work assignment, and the average number of preparation they have.

The other set of data was collected from randomly selected sophomore and junior students from each class of every faculty in the tertiary level. These respondents are so chosen because they have taken the course Educ. 16 (Educational tests, measurements and evaluation) where they have been made familiar with the principles in test construction and test administration hence they could provide the necessary information for the study. The data from these respondents crosschecked each other.

### Instrumentation

The data from the respondents were collected by the use of a questionnaire prepared by the researchers. Two sets of questionnaires were prepared. One set was accomplished by the faculty-respondents and the other set by the student respondents.

The instrument accomplished by the faculty respondents focused on the factors which they perceive to affect their testing practices. It took about five to seven minutes to accomplish this questionnaire.

Meanwhile, the questionnaire accomplished by the students dealt mainly on the guidelines and principles in test preparation/construction and

test administration. It included the general and specific principles. It required about 15 to 20 minutes for the students to finish the questionnaire.

The instrument was critically reviewed by faculty who have had sufficient experience in the field to guarantee the content validity and comprehensiveness of the tool before it was administered to the actual respondents.

## **Procedure**

The questionnaires were administered to the two groups of respondents.

The researchers collected the data from the student respondents during the class periods of each teacher.

The teacher respondents asked to accomplish the appropriate questionnaire.

The researchers observed and did informal interviews to cross-check the data to be collected.

After the questionnaires have been accomplished, they were retrieved and were statistically treated to yield the needed information to answer the objectives.

## **RESULTS AND DISCUSSION**

### **Observing the Guidelines and Principles of Constructing Written Tests**

The student-respondents were asked to rate their teachers in professional Education courses on how well they observed the guidelines in the preparation of written test. There were three parts, the first of which pertained to the general principles and guidelines while the second had to do with the preparation of specific test types and the last focused on the procedures in test administration.

Each is presented subsequently.

**General Principles and Guidelines.** There were 23 general principles and guidelines that were presented to the students from which they evaluated the compliance of their teachers in relation to testing. In general, the overall general weighted mean of 2.68 indicates that the teachers indeed practiced the rules. An examination of mean scores that had the highest mean scores tell that the students were consulted about the schedule of the examination, the items were grammatically correct, they were informed of the test coverage, that the items were significant and meaningful and that the correct answers were objectively assigned scores in that particular top ranking. The findings are found in Table 1.

By way of justifying the specific findings, a consultation of test schedule is more observed during the midterm examination when no specific schedule is posted from the Office of the University Registrar.

Teachers are considerate in inquiring from the students of their available time so that the students are not burdened to have too many examinations in a day. Based on follow up interview students appreciate this practice and from the point of view of the teachers, this process of consultation is not at all abused by students because the examination will have to be carried out within the examination week. On the other hand, during finals, the class either adheres to the prescribed schedule or will agree unanimously to have it on an earlier or later schedule. It is a common understanding in the college that teachers cannot digress from the prescribed schedule even if only one student does not conform to the intention.

The students find that the test items are grammatically correct. Obviously, the teachers know too well that vaguely stated questions are confusing and are not fair. They generally construct items that observe rules on punctuations and correct agreement of subject and verb as well as correct tenses. This practice reinforces the learning of students of correct rules of grammar, be it written or spoken as they observe their teacher do so.

Just as students are informed of test schedules, so are they with the scope of the test. This is crucial information they have to know so that they will not waste their time reviewing what are not covered in the test nor miss what ought to be reviewed. This supports the observation that before examination days, the attendance is almost if not perfect; students are around to know the scope of the test and the types of tests that will be expected.

**Table 1.** Testing practices of teachers in terms of general principles and guidelines

GENERAL PRACTICES & GUIDELINES	WM	DESC
We were informed about the coverage and test types	2.82	YES
We were consulted about the schedule of the test	2.92	YES
The questions are significant and meaningful	2.83	YES
3 to 4 different types were given	2.69	YES
Items of the particular kind were grouped together	2.73	YES
Each item was clear and definite	2.67	YES
Each item contained only one idea	2.50	SOMETIMES
The correct answer of one item was not suggested by another item	2.53	YES
Questions were stated in simple words	2.61	YES
Rules of grammar and correct usage were observed	2.90	YES
Each test was labeled and classified and instructions were complete (the instruction should identify the content of the test, how answers are given, time limits, number of points and one or two examples with the corresponding answer/s).	2.71	YES
The items were arranged from the easy to the moderate then to the most difficult	2.48	SOMETIMES
The items were challenging (not too easy nor too difficult)	2.72	
The questions were not tricky nor catchy	2.48	SOMETIMES
Questions were not directly lifted from the book or notes	2.60	YES
There were no double negative statements	2.75	YES
The questions did not suggest the answers	2.53	YES
We were required to answer all the items in the test	2.72	YES
Each correct item was given one point for the objective tests	2.80	YES
Relative weights or points were assigned to essay items depending on the difficulty level of each question	2.72	YES
Blanks were uniform length and arranged in columns	2.65	YES
The correct or incorrect responses did not follow a pattern	2.60	YES
There is evidence that the exam was freshly prepared (not re-used)	2.79	YES
<b>OVERALL WEIGHTED MEAN</b>	<b>2.68</b>	<b>YES</b>

The students find that the questions are relevant. Significant and meaningful, not the trivial ones are asked. This shows to the student that the examination is a serious and businesslike undertaking where the important information and their applications are drawn. The college encourages teachers to harness the critical and analytical thinking of students. They are often presented with problematic scenarios and based on what they have learned,

prove their knowledge and skill in giving the answers.

The students agree that teachers credit each correct answer with one point in the objective test types and the assign relative weights to essay items. The students find this practice fair because their errors especially do not get multiplied by twos or threes. In the essay tests, the credits are assigned based on the level of difficulty or the breath and depth of answers.

The students say that sometimes, teachers do not strictly observe the practice of coming up with organizing test according to labels, giving complete instructions as to how answers are to be given and where to put them and in providing answered items as guide or examples. Indeed, a close examination of examination papers attests to this finding. It is as though teachers assume that students would perfectly know how to go through the examination by way of their experiences in testing all their student life. This guideline is one that teachers have to be more patient in order to have a fair and reliable result.

Similarly, students at times may find some items that are tricky or catchy. Intentionally constructed or not, the teachers at rare times prepare these questions to find out how well students may use their common sense. In some comments given by students when evaluating teachers, they say that there are questions that are tough as if they were not learned in the lessons but actually, closer look at the item would prove they needed to be more analytical and critical in their thinking.

The students also say that sometimes the items contained only one idea. This tends to imply that a test item may convey two ideas which is confusing. The teachers have to be reminded that when constructing objective items, these have to be in simple (not compound or complex) sentences. The basic rule is to have a one liner item.

**Observing Specific Guidelines.** Besides inquiring how well teachers adhered to the general principles in test construction, the teachers were evaluated on how they prepared specific tests. The findings are found in Table 2.

The teachers are best at the labeling test format as indicated by the highest mean score. In this test, the students are given a figure and students are made to identify the parts.

**Table 2.** Observing Specific Guidelines

SPECIFIC TESTS	WM	DESC
Completion Test	2.60	YES
Enumeration	2.64	YES
Labeling	2.73	YES
Alternate Response	2.44	SOMETIMES
Multiple Choice	2.48	SOMETIMES
Analogy	2.62	YES
Rearrangement	2.64	YES
Matching Test	2.50	SOMETIMES
Essay	2.61	YES
<b>WEIGHTED MEAN</b>	<b>2.58</b>	<b>SOMETIMES</b>

The students agree that the figure to be labeled is easy to recognize and that the parts are clear. The manner of giving answers is also facilitated as they are placed in a column and designated with numbers.

Secondly, teachers are good at preparing enumeration and re-arrangement tests. The students say the stems indicate if answers had to be in order, the number of items required and if answers had to be in complete sentences or simple phrases and words. For the re-arrangement test, the teachers would identify what are the set of items to be arranged giving now the students a clear knowledge of what are in the set to be ordered, the items are not too many (that they are confused) nor short (that it is no longer challenging) and that all the items to be organized are all in the same page avoiding confusion and waste of time turning back and for the test papers.

While the essay test is more time consuming in terms of giving answers and relatively more difficult, if the stems are well prepared, then students can still enjoy taking it. The students agree that the essay items are very specific of the answers it required and that there is a variation in the questions (not all on why, discuss or explain) and that there is enough time to answer all the test questions posed before them.

There are three tests where students say that their teachers do not perfectly adhere to the guidelines. These are matching test, alternate response test and multiple choice test. These are good tests that are commonly used however, experts agree that if not properly constructed, may appear confusing and therefore not reliable.

The matching test is one confusing test because each item has so many potential answers, so it has to be strictly focused on one topic. A varied topic in this test will not enable mind-setting for the test takers. It is also observed that teachers who use this have a confusion on what is placed under column A and column B; often they are inter-changed. Column A has to be leading hence describing an item which is in Column B – the list of responses that have to be arranged alphabetically. Also, a guideline that may not be strictly observed is having the whole test in one page. Unless this is made Test I, there is no problem that the 10 to 15 items will be in two pages and that students will be turning to and fro the 2 pages looking for pairs of concepts.

The alternate response test, popularly known as “True-False” is one test that requires good comprehension on the part of the takers. At times, teachers who use it may not use the modified form where there are more wrong concepts presented and that students will have to give the word/phrase that makes it so and what will make it correct.

Lastly, the teachers may not be perfect in preparing multiple choice items. The choices may not be well prepared that the taker has only 3 choices, when it should be at least 4, and that it will be challenging to discriminate the right answers. It might be that there are instances when identifying the keyed option/correct answer come easy. It may also be that the choices are on the same line with the stem because the desire of the teacher to save on paper.

It is showing therefore that teachers need to polish more their skills in the preparation especially of matching test, modified alternate response test and the supposedly favorite of students, the multiple choice test.

**Test Administration.** It was also an objective of this endeavor to find out how competent teachers are in the conduct of tests. Table 3 presents the findings.

In general, CTE teachers are almost perfect in the way they administer their tests as evidenced by the overall weighted mean of 2.83. This finding points that the test are given in a professional manner. Specifically, almost all students agree that teachers collect all the test papers. This is to ensure that tests do not leak and that the assessment is made reliable and fair to all students. This implies that teachers truly protect their tests be-

cause it is their output and hence can be considered to be their intellectual property.

**Table 3.** Testing practices of teachers in terms of Test Administration

SPECIFIC TESTS	WM	DESC
The test was conducted in a professional and business-like manner	2.78	YES
Test papers were distributed and retrieved in systematic manner	2.87	YES
Typographical errors were corrected before the examination started	2.84	YES
The instructions were explained before the test started	2.84	YES
The teacher supervised the conduct of the test	2.88	YES
Good testing conditions were observed	2.81	YES
All test papers were collected	2.96	YES
Time to take the exam was enough	2.72	YES
The teacher reminded us of the remaining time (15 and 2 minutes) before we ended the test	2.74	YES
<b>WEIGHTED MEAN</b>	<b>2.83</b>	<b>YES</b>

Teachers also supervise closely the test proceedings. They move around to check if students are able to follow test directions and to track their time limits. Further, they ensure that students work independently and honestly. They do not leave the class on their own while tests are going on and if ever they have to attend to very important meetings, they see to it that a co-teacher or a staff supervises the test for them.

In almost similar extent are test papers distributed and retrieved in systematic fashion. As mentioned earlier, this shows a businesslike and highly professional strategy in test administration. This scheme makes efficient test administration so that time is not wasted and students feel that the activity is a serious matter.

Similarly, the almost all the student respondents agree that their teachers ensure that typographical errors are corrected before the test gets on its way and that they check that distractions are minimized to the best that they could so that the students are better concentrated in their test tak-

ing. This is closely related to keeping good testing conditions like checking that the room is well light, the windows or even at times the doors are open for good ventilation especially during the warm times of the year or that the installed electric fans are switched on. The teachers also remind students of time about fifteen or twenty minutes before time is due so that they are kept on track and again reminded 2 minutes before submitting their paper. Lastly, the students say the time given them to take the test is enough, this is because teachers know how to compute the reasonable time limit for objective tests and for essay tests. Teachers may give also allowance of about 2 to 5 minutes before requiring students to submit their paper.

The findings strongly indicate that indeed teachers of the College of Teacher Education observe the good practices of test administration.

### **Relationship Between Teachers' Profile and Teaching Practices**

This section discusses the relationship between the teachers' socio-economic profile and their testing practices in terms of the following aspects: 1) general principles and guidelines; 2) test administration; and 3) test construction. Profile was delimited to the teachers' highest educational attainment, length of service, number of preparations, and nature of work.

**Highest Educational Attainment.** Table 4 presents the relationship between the teachers' highest educational attainment and testing practices.

The table gives a general impression that there is a slight positive relationship between the teachers' highest educational attainment and testing practices as shown by an r-value of 0.37. T-test further confirms that the relationship is not significant as the computed value of 1.78 is lower than the tabular value of + 2.085 at 0.05 level of significance. The result implies that the teachers' testing practices are not dependent on the teachers' highest educational attainment.

The finding may be attributed to the equal exposure of the teachers to training related to educational testing, measurement and evaluation. Teachers who are sent to such trainings are not screened according to the degree they have obtained; rather, teachers are sent to trainings that are deemed to be needed most in the field.

Teachers in the College of Teacher Education are likewise equally exposed to trainings in educational testing. In 2003, the College invited speakers from the Philippine Normal University to lecture on educational assessment; thus the comparative means of the teachers' observance of proper testing practices across degrees.

**Table 4.** Relationship between teachers' highest educational attainment and testing practices

TESTING PRACTICE	WEIGHTED MEAN			r-VALUE
	AB/BS	MA/MS	Ed.D/Ph.D	
General Principles & Guidelines	2.71	2.69	2.66	-0.99*
Test Administration	2.8	2.84	2.81	0.24 <sup>ns</sup>
Test Construction	2.38	2.58	2.52	0.68*
<b>MEANS</b>	<b>2.63</b>	<b>2.70</b>	<b>2.66</b>	<b>0.37<sup>ns</sup></b>

$t_{0.05} = + 2.085$  \*-significant

*ns-not significant*

**LEGEND:**

Statistical Limit	Category	Descriptive Equivalent
2.51 – 3.00	3	Yes
1.51 – 2.50	2	Sometimes
1.00 – 1.50	1	Never

Further scrutiny of the relationship between the teachers' highest educational attainment and testing practices bares that there is a significant inverse correlation between the teachers' observation of the general principles and guidelines and the highest degree obtained. The result implies that there is lesser observance of the testing practices as the teacher goes up the academic ladder.

The higher the obtained degree is, the higher the expectation that the University has from the teacher; thus, more work is given to the teacher who finished post-baccalaureate courses. In the University, designations are usually given to teachers who have masters or doctorate degrees. Therefore, more time is spent in the office than preparing materials for instruction. This proposition explains why there is a significantly lesser observance of the testing practices among the MA/MS and EdD/PhD degree holders.

On the other hand, there is a significant direct relationship between

test construction and educational attainment. This means that the various principles of test construction are performed better as higher educational degrees are obtained by teachers.

Post-baccalaureate studies refresh the teachers on the principles of test construction. Issues and current trends on testing are also part of the discussion in graduate school classes. This justifies the result that higher educational attainment means observance of the specific principles in test construction.

Meanwhile, test administration is not directly affected by the degree obtained by the teachers. Test administration is usually linked to the teachers' personality and his classroom management practices as well but not to the teachers' educational attainment.

**Length of Service.** Table 5 presents the relationship between the teachers' length of service and their corresponding testing practices.

The table reveals that there is a significant inverse relationship between length of service and observance of testing practices. The finding implies that as teachers stay longer in the service, they tend to circumvent the principles of testing.

The result may be attributed to the actual occurrences that the teachers encounter along their teaching experiences. Some testing practices are actually theoretical and relative to certain conditions. The teachers might have found out that some principles do not apply and are not effective if executed to their students. Consequently, the teachers resort to practices that work better with their students.

The result may also be attributed to the teachers' convenience in testing. It cannot be denied that teaching is a profession with multi-facet-tasks; testing is only one of the many duties that the teacher has to perform. Also, teachers who have long been in the service are usually teachers who find various means by which their job could be done in the most convenient ways possible for them to be able to complete their other responsibilities. Thus, they resort to improvised techniques that will serve the same purpose as the theoretical principles.

**Table 5.** Relationship between teachers' highest educational attainment and testing practices

TESTING PRACTICE	WEIGHTED MEAN						r-VALUE
	1-5	11-15	21-25	26-30	31-35	36-40	
General Principles & Guidelines	2.79	2.60	2.71	2.60	2.81	2.57	-0.30 <sup>ns</sup>
Test Administration	2.94	2.86	2.80	2.77	2.93	2.80	-0.39 <sup>ns</sup>
Test Construction	2.72	2.53	2.65	2.48	2.52	2.38	-0.84*
<b>MEANS</b>	<b>2.82</b>	<b>2.66</b>	<b>2.72</b>	<b>2.62</b>	<b>2.75</b>	<b>2.58</b>	<b>-0.62*</b>

$t_{0.05} = + 2.085$  \*-significant

ns-not significant

**Number of Preparations.** Table 6 shows the correlation between the observance of testing practices and the teachers' number of preparations per semester.

It can be gleaned from the table that there is a consistent significant inverse relationship between number of preparations and testing practices. The result implies that greater number of preparations result to the non-observance of the testing principles among the teachers.

The number of preparations indicates the number of written examinations that a teacher has to make. Thus, a teacher who has more preparation constructs more written tests. The limited time given for the preparation of test materials tempts the teacher to divert from the rules of test construction.

General principles & guidelines and test administration are likewise affected. Due to the numerous test materials that have to be made, the teacher tends to prepare the test during the examination period. As such, the concentration is divided between test administration and preparation of test materials.

Testing practices may have also been affected by the stress that the teachers face especially brought about by the deadline set in the submission of grades. In terms of test construction, teachers tend to make tests that are easier to check; thus, they resort to construction selection items such as alternate response and multiple choice. Test administration and observation of general guidelines and principles is likewise affected in a way that teachers are forced to check papers during the examination period thus violating

rules.

**Table 6.** Relationship between the testing practices and teachers' number of preparations

TESTING PRACTICE	WEIGHTED MEAN		r-VALUE
	1 – 2	3 – 4	
General Principles & Guidelines	2.73	2.65	-1.00*
Test Administration	2.83	2.81	-1.00*
Test Construction	2.66	2.52	-1.00*
<b>MEANS</b>	<b>2.74</b>	<b>2.66</b>	<b>-1.00*</b>

**Nature of Work.** Table 7 presents the correlation between relationship between the teachers' nature of work (categorized as full time or part-time) and their testing practices.

The table shows that, on the average, both part-time and full-time teachers implement proper testing practices though the former slightly execute the principles more as bared by a higher weighted mean of 2.71 compared to 2.67.

Generally, it can be surmised that testing practices is inversely correlated with the teachers' nature of work—that is, part-time teachers tend to have a better testing practices than those who are working fulltime.

The table also shows that, except for test construction, there is an inverse relationship between the variables—that is, teacher with administrative functions tend to do better in general principles of testing and test administration.

Meanwhile, full-time and part-time teachers perform equally well in test construction.

The result may be attributed to the familiarity on policies among the part-time teachers. Their administrative functions make them more conscious of the academic calendar; thus, they tend to be more mindful of the schedule of examinations and dues for the submission of grades. Administrators are likewise exposed to testing-related issues in the college and/or university. Their awareness brings about the implementation of the testing

practices that are only acceptable to their clients.

On the other hand, there is no significant relationship between test construction practices and the teachers' nature of work. The result implies that test construction is not affected by the teachers' nature of work.

**Table 7.** Relationship between the testing practices and teachers' nature of work

TESTING PRACTICE	WEIGHTED MEAN		r-VALUE
	Part-Time	Full-Time	
General Principles & Guidelines	2.71	2.66	-1.00*
Test Administration	2.86	2.81	-1.00*
Test Construction	2.55	2.55	0.00 <sup>ns</sup>
<b>MEANS</b>	<b>2.71</b>	<b>2.67</b>	<b>-1.00*</b>

### Factors that Influence Testing Practices

The teachers of the College of teacher Education were presented with ten factors which may have a bearing on their testing practices. The findings are thus presented.

A quick glance at Table 8 would tell that in the overall, the factors have a slight positive influence on the testing practices of the teachers of the College of Teacher Education (Mean = 5.16) This points that considering all the factors which may have either direct or indirect contribution on how they manage testing activities, these accrued to positively some little effect.

Specifically, if all the factors were considered, it is solely the knowledge of the principles of test preparation that has a moderate positive contribution. This knowledge is attributed to some realities like the fact that majority of the teachers are graduates of education curriculum where there is a good training in the baccalaureate level on test and measurements; while some are graduates of psychology courses where they too have training in psychometrics, hence are also very adept with test construction. Another reason for this result is that the teachers attend to seminar workshops either locally or nationally that caters to testing procedures, hence they are provided somehow with a review on the matter. Teachers do also coach each other informally on test preparation and the fact that most of them had been

in the teaching profession for many years, this enabled them to master the knowledge of test preparation.

**Table 8.** Factors affecting testing practices of CTE faculty members

<b>FACTORS</b>	<b>GEN WTD. MEAN</b>	<b>QUALITATIVE DESCRIPTION</b>
Knowledge of principles of test construction influence	6.50	Moderate positive
Time for preparation	5.50	Slight positive influence
Class size	4.75	Slight positive influence
Teaching load	4.83	Slight positive influence
Grading system	5.25	Slight positive influence
Nature of students	5.00	Slight positive influence
Number of preparations	4.67	Slight positive influence
Nature of work assignment	5.17	Slight positive influence
Time for scoring and computing grades	4.75	Slight positive influence
Time allotted for examination	5.17	Slight positive influence
<b>Overall Mean</b>	<b>5.16</b>	<b>Slight positive influence</b>

*Legend:*

<i>1.00 - 1.50</i>	<i>very great negative influence</i>
<i>1.51 - 2.50</i>	<i>moderate negative influence</i>
<i>2.51 - 3.50</i>	<i>slight negative influence</i>
<i>3.51 - 4.50</i>	<i>no influence</i>
<i>4.51 - 5.50</i>	<i>slight positive influence</i>
<i>6.51 - 6.50</i>	<i>moderate positive influence</i>
<i>6.51 - 7.00</i>	<i>very great positive influence</i>

All the remaining nine factors are viewed to have slight positive contribution, and comparatively, the time allotted for test preparation and grading system came close in the second and third ranking while the least three factors that have slight positive effect are class size, time for scoring and computing grades and number of preparation.

Time for test preparation has slight positive influence and this is be-

cause teachers are each given a copy of the university calendar from the Office of the University Registrar where examination schedules are reflected. Furthermore, the respective chairpersons of the department make some reminders in bulletin boards or during meetings so that teachers are reminded when to prepare their tests. On the other hand, the availability of computers in each office or be it their personal equipment, makes it a lot easier to prepare test questions. This implies despite that the heavy schedule of teachers, if reminders are given, they can take time to prepare good tests.

Likewise, the grading system of the university has some positive influence. The prescribed grading scheme as mandated by the university code provides the teachers with objective basis in assigning grades to students. Similarly, the teachers have mastered the method of computing grades and as aided by technology, this factor is not giving teachers a hard time.

It is quiet interesting to note that the nature of work assignment has a slight positive influence, which has the same rank with time allotted for the test/examination.

Teachers may carry a 21- unit teaching load or have 21 units load but units are assigned to designations like department head or other functions like research, extension, student services ( student development officer, guidance counselor, medical services, sports coordinator, adviser) and the like. The findings point that teacher seem not burdened with the load for they still consider it to have a good effect on their testing regimen. It can be that their pre- service training and their long stay in the profession has truly engrained in them that the paperwork on testing is indeed a part of their profession.

On the other hand, the time allotted for the examination which is one hour (midterm) or two hours (final ) regulates testing time such that teachers are guided by these time limits hence they are aware that given the allowable time, they do not have to prepare nor too short tests that will not yield reliable indicators of student achievement nor too long an examination that students cannot finish within the given testing time.

The teachers are likewise slightly and positively influenced by the nature of the students. It has to be understood that students of the college are selected based on their IQ (entrance examination ) and their general weighted average in high school. It can be said that they are well selected

from the pool of entrants to the university. This characteristic of students may contribute to the ease in testing such that teachers can give challenging questions, administer the test easier for they can follow test instructions and have the pool of vocabulary for their level.

The nature of the subjects taught by teachers is also contributing a slight positive influence. The subjects are mostly professional education courses which teachers are very comfortable with. Results of faculty evaluation by students support this finding where teachers are found to have mastery of their respective subject areas. Again, this proves that teachers know too well their craft that they would know what assessment type is best given the peculiarities of the subjects they teach.

The teachers are not be-problemled by the number of students in their class in relation to testing. It is implied that whether they have big or small classes, their testing preparation and administration as well as scoring papers up to the computation of grades is still giving a slight positive influence. This maybe is because the difficulty comes in more in scoring and computing grades but not as much as in the preparation and conduct of the test.

Similarly, the time allotted for checking and scoring the test yielded a slight positive influence. During the midterm examination, teachers are not pressured by deadlines to submit grades, however they have to give grades to their students at a more convenient time after examination. It is during the final examination though that they are given one week after the examination to submit grades and issue grades to their respective classes. Nonetheless, the findings tell that this policy is found not to be a problem. This implies that the one week period for scoring and computing grades is reasonable enough to meet deadlines.

The least in the ranking of the factors is number of preparations. It is intriguing to note that such is least slightly influencing them but in the positive direction. This implies that even the teachers who may have four to six preparations are not as bothered. Similar to what has been mentioned earlier, the teachers have been conditioned to the peculiarities of their job so that even the number of preparations is not a big problem in testing and assessment.

It can be surmised therefore that the faculty of the College of Teach-

er Education are very competent in the use of paper and pencil tests as well as in its interpretation.

### **Relationship between the identified factors and teachers' testing practices and their profile**

The following tables present the relationship between the identified factors that affect the teachers' testing practices and their profile.

**Highest Educational Attainment.** Table 9 presents the relationship between the identified factors that affect the teachers' testing practices and their highest educational attainment. The overall correlation coefficient of -0.79 gives a general impression that the teachers' educational attainment is inversely correlated to their perception of the extent to which the identified factors affect their testing competencies. Thus, teachers tend to view the factors negatively as they go up the academic ladder. The result of the t-test further confirms that the inverse relationship between the variables is significant as the computed value of 5.76 is higher than the tabular value of 2.086 at 0.05 level of significance.

The result implies that teachers who have post-baccalaureate studies become more conscious of the different factors that have to be considered in giving tests to students. Their awareness somehow leads to a slightly negative viewpoint towards these factors as they become cognizant of their usual testing practices. The negative perspective lies on the fact that they need to adjust their usual testing practices accordingly.

More specifically, the factors with significant positive correlation with the teachers' educational attainment are knowledge on principles of test construction, number of students per class, nature of the subject, nature of work assignment, time for checking and scoring the test, and time allotted for the examination. This means that teachers who have post-baccalaureate degrees tend to have a more positive perspective towards the aforementioned factors.

Meanwhile, factors that bring about a significant inverse correlation with the teachers' educational attainment are time for preparing the test and number of preparations. The result implies that the teacher tend to develop a pessimistic view towards these factors as he goes up the academic ladder. The result may be attributed to the fact that teachers with

post-baccalaureate degrees are more aware of the proper test practices and its benefits; thus, they also become more conscientious in the preparation of their tests. Consequently, they view time in preparing the test and number of preparations as negative influences on their test practices.

**Table 9.** Relationship between the identified factors that affect the teachers testing practices and their highest educational attainment

<b>FACTORS</b>	<b>AB/ BS</b>	<b>MA/ MS</b>	<b>EdD/ PhD</b>	<b>r-value</b>	<b>Comp. t- value</b>
Knowledge on principles of test construction	6.00	6.63	6.50	0.76	5.23*
Time for preparing the test	6.00	5.38	5.50	-1.00	-3.16*
Number of students per class	6.50	5.00	4.75	0.95	13.61*
Nature of subject	6.00	5.63	4.83	0.83	6.65*
Grading system	5.50	5.00	5.25	0.31	1.46ns
Nature of students	5.50	5.75	5.00	-0.33	-1.40ns
Number of preparations	6.00	4.00	4.67	-0.14	-0.62*
Nature of Work assignment	6.00	3.88	5.17	0.95	13.61*
Time for checking and scoring the test	6.50	4.63	4.75	0.83	6.65*
Time allotted for the examination	5.50	4.50	5.17	0.79	5.76*
<b>WEIGHTED MEAN</b>	<b>5.95</b>	<b>5.04</b>	<b>5.16</b>	<b>-0.79</b>	<b>-5.76*</b>

On the other hand, the factors that are viewed to have no significant association with the teachers' educational attainment are grading system and nature of students.

**Length of Service.** Table 10 presents the relationship between the identified factors that affect the teachers testing practices and their length of service. It can be gleaned from the table that, generally, tenure has a significant positive association with the teachers' perspective about the fac-

tors in test practices as proven by a correlation coefficient of 0.80. That is, teachers who are in the service for a longer period of time tend to develop a positive position towards the factors that affect their test practices.

**Table 10.** Relationship between the identified factors that affect the teachers testing practices and their length of service

FACTORS	1 to 5	6 to 10	11 to 15	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	r-value	Comp. t-value
Knowledge on principles of test construction	6.67	6.50	6.50	6.50	6.33	6.33	7.00	6.50	0.09	0.40ns
Time for preparing the test	5.00	4.50	7.00	4.00	5.67	4.67	7.00	6.50	0.44	2.19*
Number of students per class	4.33	3.00	7.00	4.00	5.67	3.33	5.50	7.00	0.41	2.01ns
Nature of subject	4.33	3.50	7.00	5.50	5.50	3.67	7.00	6.00	0.41	2.01ns
Grading system	4.67	4.00	6.00	4.00	4.67	5.67	6.50	7.00	0.73	4.78*
Nature of students	5.00	5.00	6.50	5.50	5.17	4.33	6.50	6.50	0.55	2.95*
Number of preparations	3.67	1.50	6.50	4.00	4.83	3.67	5.50	7.00	0.59	3.27*
Nature of Work assignment	4.00	1.00	7.00	4.50	5.17	4.00	5.50	7.00	0.53	2.80*
Time for checking and scoring the test	2.33	3.00	7.00	4.50	5.50	3.33	7.00	7.00	0.64	3.72*
Time allotted for the examination	3.33	3.00	5.50	5.50	5.33	4.33	6.50	6.50	0.79	5.76*
<b>WEIGHTED MEAN</b>	<b>4.33</b>	<b>3.20</b>	<b>4.85</b>	<b>4.80</b>	<b>5.38</b>	<b>4.33</b>	<b>6.40</b>	<b>6.70</b>	<b>0.80</b>	<b>5.96*</b>

Moreover, t-test for correlated samples bares a computed value of 5.96, which is greater than the tabular value of 2.086 at 0.05 level of significance.

Length of service allows the teacher to be familiar of and internalize the system in a particular academic institution, including that of testing. Beginners are usually confronted by various issues especially so that they are just starting to get to know about the testing practices adapted in the school. As the teacher stays longer in the institution, he gets to learn about the system. Consequently, the identified factors are seen to be important elements in test preparation.

Specifically, time for preparing the test is seen to be one factor that is

seen to be viewed positively by teachers who have long been in the service. This result may be attributed to the fact that, as teachers grow in the service, they have more materials to source out their test materials from.

It can also be noted that as teachers stay longer in the service, grading system and number of students has positive influence in their testing practices.

Number of preparations has a very great positive influence to the testing practice of teachers with length of service ranging from 11 to 15 and 36 to 40 and moderate positive influence to teachers who are 31-35 in service. No influence at all to teachers who are 1 to 5 and 16 to 20 years in service and negative influence to teachers who are 6 to 10 in service.

Nature of work assignment has a very great positive influence to the testing practice of teachers who are 11 to 15 and 36 to 40 years in service. It has a moderate positive influence to teachers who are 31 to 35 years in service and slight positive influence to teacher who are 16 to 25 years in service. There is no influence at all to teachers who are 1 to 5 and 26 to 30 years in service and has negative influence to teachers who are 1 to 5 in service.

Time for checking and scoring the test has a very great positive influence in the testing practice of teachers who are 11 to 15 and 31 to 40 years old. It has a moderate positive influence to teachers who are 21 to 25 years in service and slight positive influence to teachers 16 to 20 years in service. It has negative influence in the testing practice of the rest of the teachers.

Time allotted for the examination has a negative influence to teachers who are younger in the service, however, there's a great positive influence as teachers stay longer in the service.

**Nature of Work.** Table 11 presents the relationship between the identified factors that affect the teachers' testing practices and their nature of assignment. Computed z-value of 4.69 in all items shows that there are significant relationships between the above-mentioned factors that affect the teachers' testing practices and their nature of assignment.

All of the above-mentioned factors except time allotted for exami-

nation factor, have higher positive influence to the testing practices of part time teachers as compared to fulltime teachers. Result shows that the lesser the teaching load, the greater the positive influence.

**Table 11.** Relationship between the identified factors that affect the teachers testing practices and their nature of assignment

FACTORS	Part time	Full time	r-value	z-value
Knowledge on principles of test construction	6.60	6.47	-1.00	-4.69*
Time for preparing the test	6.40	5.24	-1.00	-4.69*
Number of students per class	6.20	4.65	-1.00	-4.69*
Nature of subject	6.40	4.88	-1.00	-4.69*
Grading system	5.40	5.12	-1.00	-4.69*
Nature of students	6.20	5.06	-1.00	-4.69*
Number of preparations	4.60	4.53	-1.00	-4.69*
Nature of Work assignment	4.80	4.76	-1.00	-4.69*
Time for checking and scoring the test	5.00	4.82	-1.00	-4.69*
Time allotted for the examination	4.60	5.06	1.00	-4.39*
<b>WEIGHTED MEAN</b>	<b>5.62</b>	<b>5.06</b>	<b>-1.00</b>	<b>-4.39*</b>

**Number of Preparations.** Table 12 shows the relationship between the identified factors that affect the teachers testing practices and their number of preparations. Result presents significant relationships along time for preparing the test, nature of subject, grading system, nature of students, number of preparations, time for checking and scoring the test, time allotted for the test. Knowledge on principles of test construction, number of students per class, and nature of work assignment show no significant relationship.

Result shows that, as the number of preparation increases, time for the preparation of test, nature of subject, number of preparations, nature of work assignment and time for checking & scoring the test lead to a diminishing positive influence in the testing practices of teachers. On the other hand, grading system, nature of students and time allotted for the examination have an increasing positive influence on the testing practices of teachers.

**Table 12.** Relationship between the identified factors that affect the teachers testing practices and their number of preparations

FACTORS	1 to 2	3 to 4	5 & up	r-value	t-value
Knowledge on principles of test construction	6.80	6.33	7.00	0.29	1.36ns
Time for preparing the test	6.20	5.33	5.00	-0.97	17.84*
Number of students per class	5.40	4.80	5.50	0.13	0.59ns
Nature of subject	5.60	5.13	5.00	-0.95	-13.61*
Grading system	5.00	5.20	5.50	0.99	31.39*
Nature of students	5.40	5.40	4.50	-0.87	-7.89*
Number of preparations	5.40	4.33	4.00	-0.96	-15.33*
Nature of Work assignment	5.60	4.40	5.50	-0.08	-0.36ns
Time for checking and scoring the test	5.00	4.87	4.50	-0.97	-17.84*
Time allotted for the examination	4.80	4.93	5.50	0.94	12.32*
<b>WEIGHTED MEAN</b>	<b>5.52</b>	<b>5.07</b>	<b>5.20</b>	<b>-0.69</b>	<b>-4.26*</b>

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

The following conclusions were drawn based on the findings of the study:

1. The teachers of the College of Teacher Education generally practice the general principles and guidelines in testing.
2. Teachers observe to the specific guidelines in test construction, specifically in completion, enumeration, labeling, analogy, rearrangement, and essay tests. However, principles in the construction of alternate response, multiple choice and matching tests are sometimes followed.
3. Proper test administration practices are always observed by the teachers of the College of Teacher Education.
4. Teachers' length of service, number of preparations, and nature of work

have a significant inverse relationship with their testing practices; on the other hand, the teachers' highest educational attainment does not affect their testing practices at all.

5. The identified factors have a slight positive influence over the teachers' testing practices.
6. The teachers' length of service is directly correlated with the influence of the factors on their testing practices. Meanwhile, the teachers' highest educational attainment, nature of work, and number of preparations is inversely correlated with the effect of the pre-identified factors over their testing practices.

### **Recommendations**

Based on the findings, the following recommendations are forwarded.

1. The University should sponsor or conduct a seminar-workshop to enhance the teachers' competencies in preparing tests with emphasis on the principles for the construction of alternate response, multiple choice and matching tests.
2. The College of Teacher Education should design a scheme such that the teachers' number of preparations will be limited to a maximum of three per semester.
3. The University should give more time for the teachers in terms of the submission of grades such that the faculty will be able to concentrate well on the administration of tests.
4. A similar research should be conducted to include the assessment of written tests of teachers in the University.
5. Further study should be conducted to check on the other test practices of teachers, including the analysis of the discrimination and difficulty indices of test items constructed by teachers for major examinations.

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