



INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

2395-2636 (Print); 2321-3108 (online)

TEST PREFERENCES OF UNIVERSITY SCIENCE HIGH SCHOOL STUDENTS IN VARIOUS EXAMINATIONS

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ABSTRACT

With the assumption that preferences of the University Science High School (USHS) students on various types of examination vary in each group of courses they take, this study determined the most and least preferred types of examination of USHS students on various types of examination in their Junior High School (Grades 7 through 10) curriculum. Three hundred (300) students were selected. Ten (10) general types of examination were included in the questionnaire, which the participants needed to rank from 1-10 (1 as the most preferred and 10 as the least preferred). From the data collected, means were computed to determine the overall rankings of the various types of examination. The computed means showed that multiple choice is the most preferred type of examination of the USHS students while problem solving is their least preferred. This result is true across the curriculum. Moreover, the overall ranking of the types of examination revealed that their preferences have the same arrangement across curriculum. The USHS students' preferences arranged from most preferred to least preferred are multiple choice, binary choice (true or false), short-answer, matching type, enumeration, essay, definition, performance or practical, oral, and problem solving.

Keywords— preference, types of examination, Junior High School curriculum

1. INTRODUCTION

Evaluation, as part of the assessment on students' progress, is defined as the process of obtaining information and using it to form academically fair judgments which in turn are for decision making (TenBrink, 1974).

From the educational spectrum, evaluation is an important part of the teaching and learning process. It is included in the operations and components of some models of teaching such as Popham-Baker's (1970) Goal-Oriented-Instructional Model and Gronlund's (1974) Instructional Model.

Educators constantly seek for ways to present materials, more effective and efficient

teaching styles, as well as the appropriate forms of evaluation to gauge students' performance. Educators pay much attention in evaluation as it plays a vital role in determining the effectiveness of educational activities done in the classroom in view of proof or evidence. Moreover, evaluation is an essential part of what teachers do as it evaluates if the identified learning objectives were achieved by the students.

Most teachers evaluate their students through giving examinations. Good examinations measure both academic knowledge and the student's ability to transfer that knowledge to practical use (Pronto, 2012). There are various types

of examination. Davis (1999) enumerated some of them such as multiple choice, binary choice (true or false), short-answer (identification), matching type, enumeration, essay, definition, performance or practical, oral, and problem solving.

Students vary in terms of their test preferences in various examination since every individual has their own choices which may differ from one another in line with the theory of individual differences. In this sense, preference is a choice of one thing over the other. The repertoire of assessment methods used in education has expanded considerably in recent years. New modes of assessment have enriched the "conventional" evaluation setting, formerly characterized by both the multiple-choice examination and the traditional evaluation by essay (Sambell et al., 1997). More recently, portfolios, self and peer assessment, simulations, and other innovative methods were introduced in the educational contexts. These concepts make up the current evaluation context.

Struyven (2002) conducted a review that tried to provide educators the students' perceptions on assessment in higher education institution (HEI) and its influences on student learning. It was stated that within the conventional assessment practices, students perceived the multiple-choice format as more favorable than essay items or the constructed response. The students' preference to this examination format is based on their perceptions on the perceived difficulty, lower anxiety and complexity, and higher success expectancy.

Similarly, Traub and McRury (1990) found out that their students also report more positive attitudes towards multiple-choice tests because this type of examination seemed easier to prepare, easier to take, and may produce higher relative scores.

Nevertheless, these results do not apply for the entire group of students. Birenbaum and Feldman (1998) reported that students with good learning skills, who have high confidence in their academic ability, preferred the essay type of assessment over the multiple-choice type of examination. Conversely, students with poor learning skills, who had low confidence in their academic ability, preferred the constructed response

type of assessment. The study also indicated gender differences, with males having more favorable attitudes towards the choice response format than females.

It is in this regard that the focus of this study is to examine the test preference of the University Science High School (USHS) students of the Central Luzon State University (CLSU). The respondents are enrolled in the Junior High School (Special Science Curriculum). Students' preferences in various types of examination may vary on different content areas since they differ in nature.

The results of this study may be considered by educators particularly those who teach Junior High School students in improving their evaluation techniques or assessment practices and decision making of what appropriate type of examination to use in the evaluation, thus achieving high quality learning and education.

2. METHODOLOGY

The methodology discusses the research design, participants, instruments, and data analysis.

Research Design

This study used a descriptive design which aimed to describe the test preference of the University Science High School (USHS) students on various types of examination. By using a descriptive design, the researcher determined the students' most and least preferred types of examination in their Junior High School (Special Science) curriculum.

Participants

A total of 300 University Science High School (USHS) students out of 364 served as official respondents of the study. They were composed of 170 Grades 7 and 8 students and 130 Grades 9 and 10 students. The participants were selected as they are enrolled in the institution.

Instruments

The researcher used a questionnaire as an instrument in gathering data. The questionnaire has two parts. The first part contained the respondent's name, year, and grade levels. The second part has three items which determined the most and least preferred types of examination of the participants in their curriculum. Each item contained ten (10) types of examination as their options that they needed to rank from 1 (most preferred) to 10 (least preferred).

The instrument was tested for reliability and validity. The reported reliability and validity coefficients were 0.82 and 0.31, respectively.

Methods of Data Analysis

The researcher computed the mean of the collected data and determined the overall ranking of the various types of examination in terms of USHS students' preferences. A lower mean indicated a higher rank. This was done in each subject area.

3. RESULTS AND DISCUSSION

Table 1 presents the test preferences of the University Science High School (USHS) students on various examination in their courses. The data revealed that their most preferred type of examination is multiple choice with the mean of 2.61, and their least preferred type of examination is problem solving with the mean of 8.2. It could be noted that students prefer selected-response items than the constructed-response test formats.

Table 1: Test preference of students on various examination in their common subjects

TYPES OF EXAMINATION	MEAN	RANK
a. Multiple choice	2.61	1
b. Binary choice (True or False)	3.32	2
c. Short-answer (Identification)	3.92	3
d. Matching type	4.48	4
e. Enumeration	4.7	5
f. Essay	6.07	6
g. Definition	6.32	7
h. Performance or Practical	7.64	8
i. Oral	7.73	9
j. Problem solving	8.2	10

The data on Table 2 revealed the preferences of the University Science High School (USHS) students in various types of examination in their core subjects. It showed that their most preferred type of examination is multiple choice with the mean of 2.54 while their least preferred type of examination is the problem solving with the mean of 8.24. Similar to their common subjects, students preferred types of test with choices.

Table 2: Test preference of students on various examination in their core subjects

TYPES OF EXAMINATION	MEAN	RANK
a. Multiple choice	2.54	1
b. Binary choice (True or False)	3.31	2
c. Short-answer (Identification)	4.15	3
d. Matching type	4.71	4
e. Enumeration	4.78	5
f. Essay	5.77	6
g. Definition	6.26	7
h. Performance or Practical	7.53	8
i. Oral	7.73	9
j. Problem solving	8.24	10

Table 3 shows the preferences of the University Science High School (USHS) students on various types of examination in their special science subjects or the content subjects. The data on Table 3 revealed the consistency of the students' preferences. Their most preferred type of examination is multiple choice with the mean of 2.98 while their least preferred type of examination is problem solving with the mean of 7.69.

Table 3: Test preference of students on various examination in their special science or content subjects

TYPES OF EXAMINATION	MEAN	RANK
a. Multiple choice	2.98	1
b. Binary choice (True or False)	3.53	2
c. Short-answer (Identification)	4.34	3
d. Matching type	4.64	4
e. Enumeration	4.98	5
f. Essay	5.81	6
g. Definition	6.18	7
h. Performance or Practical	7.26	8
i. Oral	7.56	9
j. Problem solving	7.69	10

Respondents prefer multiple choice type of examination in their common, core, and special science or content subjects. The findings confirmed the claim of Traub and McRury (1990) that students report more positive attitudes towards multiple

choice tests on the grounds that these examinations seemed easier to prepare, easier to take, and may produce higher relative scores.

The least preferred type of examination was problem solving. This could be attributed to the notion that problem solving is not very appropriate on most of their subjects and only suitable in some particularly subjects like Mathematics and Physics.

The data showed similar rankings in the preferences of the students in different types of examination on the three subject areas. The arrangement of ranking is as follows: (1) multiple choice, (2) binary choice (true or false), (3) short-answer (identification), (4) matching type, (5) enumeration, (6) essay, (7) definition, (8) performance or practical, (9) oral, and (10) problem solving.

Students' test preferences in various examinations are affected by the degree of difficulty of the examination format. The types of examination that students most preferred are objective types. This is in line with the findings of Birenbaum and Feldman (1998) which stated that students with high test anxiety have more favorable attitudes towards the open-ended format and a preference to the choice-response type of test.

Compared to the other types of examination, multiple choice test can be answered quickly because there are already choices given. Students are not required to memorize a lot of facts but just understand the main principle or concepts, read and review, then recall and recognize what they have reviewed as they analyze the questions. Moreover, more students preferred multiple choice test maybe because career examination is in the multiple choice format.

Students, as well as teachers have different preferences as per types of examination. Some teachers are aware of their students' test preferences but they insist in giving their preferred type. Some teachers consider the preference of their students on various types of examination. Kulm and Malcolm (1991) analyzed the students' reasons for their examination-type preferences thru a three-stage process. The third stage of that process stated that their reasons were categorized by using key words such as "memorization", "role playing",

"understanding", "better learning", "anxiety", and "pressure".

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