University of Swaziland

Faculty of Education

Department of Educational Foundation

November 2013

Title of paper: Tools of Measurement and Evaluation

Course Code: EDF628

Time allowed: Three (3) hours

Notes and Instructions: The total for the paper is 100% .

This paper is not to be opened until permission has been granted by the invigilator.

Answer all questions

Question one

    (a)   What is the difference between assessment and evaluation? (5 marks)

    (b)   Explain how these two processes are helpful in improving practice in schools/organisations-support your answer with examples? (10 marks)

Question two

(a) What is item analysis? (5 marks)

(b) Explain the importance of item analysis in improving practice in schools or in educational organisations such as the Examination Council? (5 marks)

(c) What is the difference between difficult level or index and discrimination index? (5 marks)

Question three

(a) Calculate the difficult index or level of these two following items/questions and interpret the results. (10 marks)

Distractors	A	B	C	D
Questions 1	O	4	23 *	3
Question 2	11 *	14	3	2

Key:*correct answer!

Question Four

(a) Calculate the discrimination index of these two items and interpret the results (10 marks)

Key: 1 correct answer
    0 wrong answer

Students	Scores	Item (1)	Item (2)
Thoko	90	1	0
Simon	90	1	0
John	80	0	0
Charles	80	1	0
Sonia	70	1	0
Robert	60	1	0
Cliford	60	1	0
Khelina	50	1	1
Justice	50	1	1
Tom	40	0	1

Question 5

(a) As a classroom teacher, head of Department, Deputy head teacher , head teacher or head of an organisation you are always expected to carry out research activities mainly for improving practice in your organisation.   Given this topic: **The Complexities of validity in school examinations: A Case study of SGCSE in Swaziland.**

Explain how you can address this topic (explaining the research design and methods to be deployed); stating all the necessary stages required for this topic. (10 marks).

End of the paper

Marking guide: EDF628

All answers must be supported with examples..

Question one

(a)   What is the difference between assessment and evaluation?
      Assessment focuses on:
      - Formative in nature-focuses on going classroom processes to improve practice and learning;
      - Process-oriented-focusing on how the process of learning is taking place;
      - More diagnostic-aiming at identifying learning areas for improving practice;

      Evaluation focuses on:

      - Summative in nature--concern with final results in order to gauge quality of learning;
      - Product-oriented- concerned more about the end product. What has been learnt by the students;
      - More judgemental in nature-aiming at making an overall judgement or grading students performance-through final scores/marks.

(b)   Explain how these two processes are helpful in improving practice in schools/organisations-support your answer with examples?

-**Assessment** helps in understanding the on-going educational and classroom practices. This helps in providing current feedback and it also works as a diagnostic educational tool;

-It also takes into account all the educational processes in the classroom as key ingredient for learning;

-**Evaluation** helps in gauging the quality of education provided in schools and by any educational establishment such as the examination Council.

It helps educators not to loose focus on the product of educational establishment-schools;

It helps educators to make sound educational judgement.

Question two

(a) Item analysis is a process of finding the flaws in an test item, diagnosing information about students learning practices.

   (b)Importance of item analysis:

   - Provides means of understanding the learner;
   - Provides teacher professional development;

4

- Prepares teachers to be best test items writers;
- Provides feedback;
- It helps in improving the curriculum;
- It address misconception.

Question three

    (a)   Difficulty level index:

- It's an educational process which helps in assessing the difficulty level of an item through a special educational formula-R\T.

    (b)   Question one: Difficulty level $= R/T \times 100$

$$= 23/30$$

$$P = 0.76.7$$

This means question 1 was easy

Question two:

Difficulty level $= R/T \times 100$

$$11/30$$

$$P = 0.36$$

This means the test was moderate.

Question four

    (a) Discrimination index for item 1=
        4-4=0/5= DI 0. Meaning that there is no/zero discrimination.

        Question 2. Discrimination index =
        0-3=-3/5
        DI=-0.6.
        Negative index tells us that the lower achievers got more correct answers compared to higher achievers-this requires the teacher to re-visit the item.

Question 5

(a) Given this topic: **The Complexities of validity in school examinations: A Case study SGCSE in Swaziland.**

Explain how you can address this topic (explaining the research design and methods to be deployed); stating all the necessary stages required for this topic.

-**The focus** of the study is to investigate the relationship between content validity and students' cognitive performance;

-This would be achieved through these **research questions:**

- What is the nature of the relationship between content validity and students' academic success/performance?
- What factors best explain the difference in students performance/achievement

-**Targeted population**

- Teachers;
- SGCSE examiners.

Tools to be deployed for data collection

- Interviews;
- Documentary evidence;
- Questionnaires.

Data analysis and interpretation

Phenomenology approach will be used

Discussion, conclusion and recommendations.