Asian Journal of Education and Social Studies

Volume 50, Issue 9, Page 152-166, 2024; Article no.AJESS.121856
ISSN: 2581-6268

Candidates' Items Responses Analysis and Teachers' Assessment Practices in Secondary Schools in Zanzibar

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: https://doi.org/10.9734/ajess/2024/v50i91577

Open Peer Review History:
This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: https://www.sdiarticle5.com/review-history/121856

Original Research Article

Received: 21/06/2024
Accepted: 26/08/2024
Published: 29/08/2024

ABSTRACT

The study aimed to assess the influence of Candidates' Item Responses Analysis (CIRA) on teachers' assessment practices in secondary schools in Zanzibar. It addressed two research question: in what ways do candidates item responses analysis influences the assessment practices used by secondary school teacher? And what are the common assessment practices applied by secondary school teachers? Guided by Item Responses Theory, which emphasizes the design, development, and scoring of assessments, the study employed a descriptive cross-sectional survey design in Northern 'A' and Northern 'B' districts in Zanzibar. The study used 80 respondents from

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Cite as: *Kihiyo, Benedict M., Saul C. Mpeshe, and Salvatory F. Mhando. 2024. "Candidates' Items Responses Analysis and Teachers' Assessment Practices in Secondary Schools in Zanzibar". Asian Journal of Education and Social Studies 50 (9):152-66. https://doi.org/10.9734/ajess/2024/v50i91577.*

six lower performance and higher performance secondary schools. The respondents were selected through non-probability sampling, whereas convenience sampling was used to gather data from respondents who are readily available. Data were collected through questionnaires and observations and analyzed descriptively. The finding shows that CIRA influenced teachers in preparing students for national exams with the higher mean score of (M=3.47) and evaluating instructions effectiveness with a mean score of (M=3.31), but had less influences on assessment methods, such as portfolios and peer assessments with a mean score of (M=3.00).The study concluded that enhancing teachers' knowledge of CIRA could improve assessment practices, particularly in preparing high-quality test items and diversifying assessment methods , because teachers had limited knowledge and resources to apply modern assessment practices such as portfolios and peer assessment something which led poor performance of the students in the final examination.

Keywords: Candidates' Item Responses Analysis (CIRA); assessment practices.

1. INTRODUCTION

Assessment involves gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what students know, understand and can do with their knowledge as a result of their educational experiences. This includes formal testing and examination and alternative practices such as in-class questions and answers, observation of classroom behavior, homework, classwork assignments, portfolios and students' involvement practices such as peer and self-assignments [1]. Assessment enables teachers and students to draw inferences from the information obtained and act accordingly, such action may aid in making the necessary improvements to teaching and learning [2].

Bryan, Musgrove, & Power [3], assert that classroom assessment should encompass with a range of activities that gathered about students' learning information and the factors that affect learning by taking into consideration the resources, time and expertise available for improving learning. These activities also known as classroom assessment practices, which involve all activities done in the classroom during the teaching and learning process, and it provides feedback to the students. Assessment practices involve purpose, methods and procedures used for teaching and learning.

The purpose of classroom assessment practices is divided into three parts namely; diagnostic assessment (assessment *for* learning), formative assessment (assessment *of* learning) and summative assessment (assessment *as* learning). Diagnostic assessment (assessment *for* learning) is done at the beginning of the topic or a course to assess the knowledge, interest, lived experiences, strengths and weakness of a learner [4]. Formative assessment (assessment *of* learning) is an ongoing assessment process for learning that teacher use every day during teaching and learning process and understanding to identify learning needs and adjust learning appropriately [5]. Its primary goal is to provide feedback to learners and teachers by helping them to identify areas of strengths and weakness.

Formative assessment is used to inform teaching and learning decisions, allowing for adjustment and improvements to be made in real-time. Formative assessment includes, quizzes and tests, peer review, and self- assessment. Another purpose of assessment practice is summative assessment (assessment *as* learning)., is a one-time evaluation that take place at the end of learning cycle, such as course or program. The purpose of summative assessment is to measure a learner's overall understanding and to ensure that they have met required standards on the way to earning certification for school completion or enter certain occupation. Summative assessment includes final examination, portfolios and performance tasks [6].

Assessment methods are strategies, techniques, tools and instrument used to collect information about pupils' learning. These involves tradition assessment methods that based on paper-and pencil test made up by multiple choice, matching, true or false, short answer and essay questions. While modern methods, are portfolios, presentation, group discussion, individual assessment, observation, debate, performance task, checklist and group assessment. [7].

Assessment procedures divided into three parts, namely source of items and tasks, methods of providing feedback and reporting and time spend on assessment and evaluation. Sources of assessment items and task can be developed from different sources which can be made from teachers themselves or item made by others. Methods for providing feedback and reporting can be derived once the assessment method administered and scored, and the results needed to be communicating to the students' final report during the course.

In Tanzania assessment practices are crucial in determining the effectiveness of education system and overall development of the country. The assessment practices include various forms of evaluation such as diagnosis assessment, formative assessment and summative assessment. Teachers use various methods like questioning, observation, self-assessment, portfolios, assignment, practical test and written examination to measure students' achievement and to make decision about their progress [8].

In order to effectively implement assessment practices and help teachers on assessing students, the National Examination Council of Tanzania (NECTA), introduced Candidates' Item Responses Analysis (CIRA) in 2012 onwards. As a way of giving performance examination feedback to the teachers and students. This involves all the examination and assessment that administered by the council namely, Standard Four National Assessment (SFNA), Primary School Leaving Examination (PSLE), Form Two National Assessment (FTNA), Certificate of Secondary Education Examination (CSEE) and Advance Certificate of Secondary Education Examination (ACSEE). Candidates' Item Response Analysis enables teachers to gain deeper insights into students' learning processes, identify misconceptions, and tailor instructional strategies to meet individual needs. The analysis report is intended to contribute towards understanding of possible reasons behind the candidate response performance and the factors that made the candidate fail to score high marks in the questions provided. The analysis is organized in such a way that the candidate performance in individual item presented by indicating the percentage of candidate who scores various marks based on their responses [9].

1.1 Statement of the Problem

Assessment practices played significance role in preparing learning achievement for students and teachers respectively. The authentic assessment help teachers to have better understanding whether his/her learning objectives attained or not. The best ways of using assessment practices depending on planning test items, administering of test, marking and providing assessment results. Teachers use various methods of assessment to determine student's progress in learning and difficulties encountered [10]. Candidate item response analysis is one among the innovative assessment tool that introduced by National Examination Council of Tanzania in 2012 to help teachers in performing their daily classroom assessment practices. This feedback report contains all the questions and their responses (right responses and wrong responses) attempted by students in the respectively subjects. The report also provides the information about the best responses, the most topics or content appear, arrangement of test items, awarding criteria, the most question attempted and further recommendation for improvement of performance. Also, the report highlights the factors that made the candidate fails to score high marks in the questions [11].

Every year all secondary schools in Tanzania receive Candidate item response analysis of Form Two National Assessment (FTNA) and Certificate of Secondary Education Examination (CSEE) in order to help teachers in performing their daily classroom assessment practices, development and refinement of test item, enhance reliability and validity of test, and improve academic performance in the national examination administered by National Examination Council of Tanzania. Though Candidate item response analysis reached to the respected secondary schools, still there is poor academic performance in secondary schools in northern region in Zanzibar as data from Table 1.

Therefore, this study aimed to assess the influence of Candidate item response analysis on assessment practices in secondary schools. The study employed quantitative research approach to gather information on the influence of Candidates' item responses analysis on assessment practices in secondary school in Zanzibar.

Table 1. The CSEE results of some schools of Northern region in Zanzibar

Year	Name of the school	No: of the student registered	No: of the student who sat for examination	Division					Position region wide	Position nation wide
				I	II	III	IV	0		
2021	Bubwini S.S	145	145	0	1	4	54	84	20/23	4123/4141
	Matemwe S.S	42	41	0	0	0	13	28	23/23	4139/4141
	Kijini S.S	51	49	0	0	0	23	26	21/23	4124/4141
2020	Bubwini S.S	119	119	0	0	0	32	87	20/23	4123/4141
	Matemwe S.S	65	63	0	0	0	06	57	23/23	3955/3956
	Kijini S.S	98	96	0	0	1	16	79	21/23	3953/3956
2019	Bubwini S.S	124	123	0	0	2	51	70	18/23	3445/3484
	Matemwe S.S	69	69	0	0	0	14	55	23/23	3907/3908
	Kijini S.S	132	128	0	0	0	31	94	21/23	3902/3908
2018	Bubwini S.S	82	81	0	0	0	46	35	17/20	3445/3488
	Matemwe S.S	55	55	0	0	0	21	34	19/20	1383/1371
	Kijini S.S	22	20	0	0	0	8	12	4/4	2968/3039
2017	Bubwini S.S	97	87	0	0	0	50	37	16/19	2983/3039
	Matemwe S.S	24	2	0	0	0	7	17	6/6	1731/1738
	Kijini S.S	145	145	0	1	4	54	84	20/23	4123/4141

Source: National examination Council of Tanzania

2. LITERATURE REVIEWS

2.1 Candidates' item Responses Analysis and Teachers' Assessment Practices

The study conducted by Omarov, Mohamed, Alghurabi, Alallo, Ali, Hassan, Demeuuova, Viktorovna, & Nazym [12] on distractor analysis in multiple-choice by investigate the quality of instructors written multiple-choice grammar items found that most of the teacher performed well in construction of distractors and there is acceptance fit Rasc model and high reliability malfunctioning distractor were identified. Therefore, the study shown that the knowledge of item responses analysis help teachers in improving the assessment practices in preparing the test item. Moreover , Saepuzaman , Istiyono & Haryanto [13], on their study of characteristics of fundamental physical higher-order thinking skills test using item response theory analysis, that aimed to determine the characteristics of the fundamental physics higher-order thinking test for prospective physics teacher using item response theory analysis found out all test items prepared by teacher have good discriminating power parameters and are classified as a good also difficulty level analysis showed that almost all items had good step parameters. Therefore, the study revealed that the knowledge of teachers about item responses analysis influence them to develop a good test item.

2.2 Common Assessment Practices Applied by Secondary School Teachers

The study conducted by Ozen & Safiye [14], on teachers' classroom assessment practice for assessment as learning, found out in-class teacher practices were incapable of supporting Assessment as Learning and promoting self-regulated Behaviour and that many of the assessment activities were teacher-centered. Teacher did not apply self-assessment or peer assessment practices and the feedback they gave to the students was mainly based on measurement scores. Furthermore Saefurrohman & Balinas (2016), assert assessment for learning as a common purpose of assessment used by majority of Filipinos and Indonesian teachers as a classroom assessment practices in ELL classes. Also, they prepared and made their own assessment by using items from publishing text book as their primary source for constructing assessment items and use written comments as their primary method for providing feedback. Also, learners' diaries, is one among the assessment practice that used by teachers.

Cavalari & Aranha [5], shown that most of teachers in Sao Paulo, Brazil uses learners' diaries as asynchronous form of assessment in the form of teachers' feedback on learners' diaries something which increase learners' autonomous learning. Moreover, the study conducted by Mehadi [15], aimed to investigate teachers' classroom assessment practices of secondary school in Bangladeshi, explored that teachers' assessment practices followed traditional method of assessing students. The dominated assessment activities were oral questioning and classroom questions are basically focused very specific responses and encourage rote learning. Similarly the traditional assessment procedures was revealed by Melaku & Bejene [16] on their study that attempted to investigate assessment practices and factors for grade 8 students scores disparity in regional versus teacher-made exams, shown that teachers were applying the traditional pyramid of assessment procedures whereby the proportion of assessment of learning (summative assessment) dominates assessment as learning and assessment for learning which are vital for better learning and performance. Also, the study conducted by Ferit [7] about English Language teachers' assessment practices in Turkey, indicates that traditional ways of assessment such as multiple-choice and gap filling are the most preferred assessment items while listening and speaking skills appeared to be ignored skills on the examination.

Furthermore, Gadam, Shewangezaw & Geta [8], revealed that group work as the dominant assessment practices used by teachers. On his study about the beliefs and practices of group work assessment of secondary school teachers, found out most of the teachers had favorable beliefs towards group work assessment. Also, Isaac, Barnabas, & Isaac, [17], on the study that explored the perceived influence of assessment on the teaching and learning mathematics in junior high school, indicates that class exercise, homework and trial work were the most common mode of assessment used by teachers during mathematic instructions. In addition to that, Hakki & Nur [18] stressed on formative assessment as assessment purpose used in English language classes. On their study

aimed to investigate the existing language practices in the 4th grade classroom, indicates that teachers carry out English language assessment and evaluation at the 4th grade with mainly formative purpose. As the language skills, writing and vocabulary are more commonly assessed.

2.3 Theoretical Framework

This study employed Item Response Theory. The theory that is propounded by Fredric Lord. Item Response Theory is a statistical framework used to analyze the relationship between individual's performance on a test and the test items themselves. It is widely used in educational and psychological measurement to evaluate the quality of test items, estimate individuals' abilities and develop assessment. It takes into account the characteristics of both the items and individuals being assessed. IRT was initially developed in 1950s and 1960s by Fredric Lord and other psychometricians who had the goal of developing a method and able to evaluate respondents without depending on the same items included in the test. The model was evolved from classical measurement theory with the purpose of overcoming many of its limitations [19]. The theory composed with five keys concepts namely; Item Characteristics Curve (ICC); this represent the relationship between the probability of a correct response to an item and underlying trait being measured. It illustrates how an individuals' ability influences their likelihood of answering an item correctly. Test Information Function (TIF); show how much information about an individual's ability is provided by different levels of latent trait. It helps to understand how well a test can differentiate between individuals with different abilities levels. Difficulty Parameter (b); in IRT each item is characterized by its difficulty parameter, which indicate the level of ability at which there is 50% chance of answering the item correctly. Discrimination Parameter (a); This parameter measures how effectively an item differentiates between individuals with high and low abilities. Item with higher discrimination parameter is better at distinguishing between individual with varying abilities. Guessing Parameter (c); some multiple-choice items may have a guessing parameter that account for the probability of getting the item correct by guessing. This item is relevant when dealing with multiple choice item with three or more options [1].

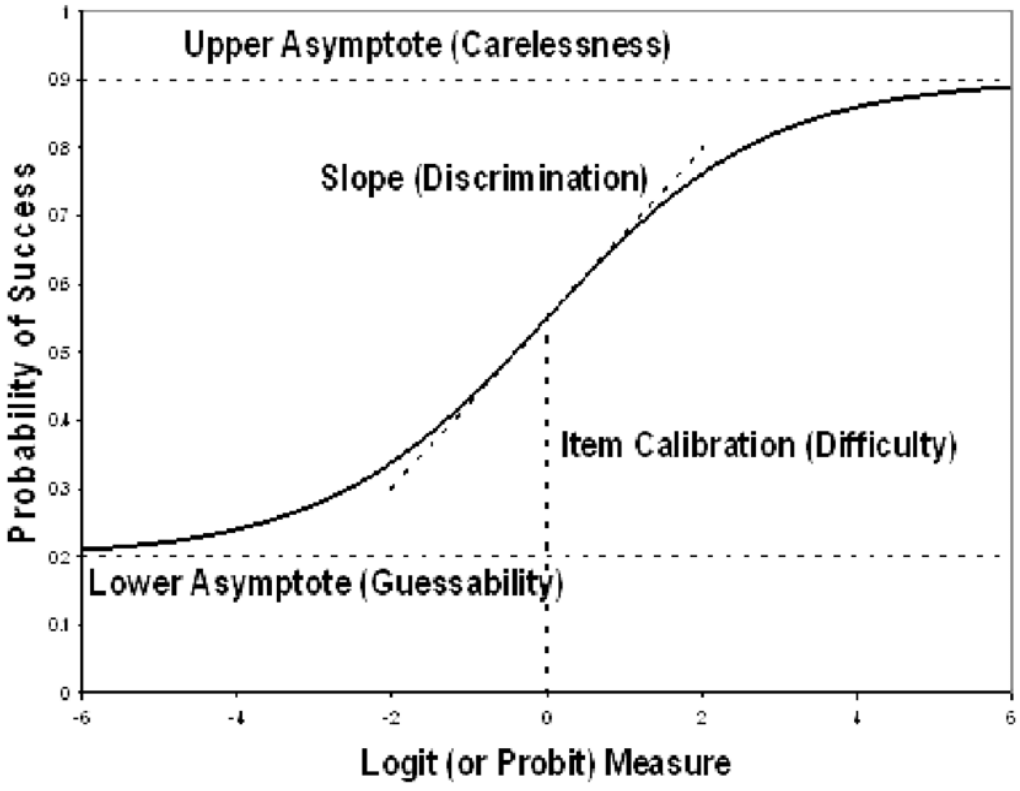

Fig. 1. The Item Characteristic Curve (ICC)

The relationship between item response theory and assessment practices is significant, as IRT has greatly influenced the design, development, and scoring of assessments. The rationality of the IRT model to assessment practices, rely on a well-designed and adhere the principles of Item Response Theory, this include the creation of high-equality items that are relevant, unbiased and appropriate calibrate. Also, the assessment practice can influence the way IRT model are used in practice. For example, the choice of assessment format like multiple choice or constructed responses can impact the applicability of IRT models similarly the use of adaptive testing or other innovative assessment approaches can affect the way IRT is utilized in practice.

3. MATERIALS AND METHODS

3.1 Research Approach and Design

The study employed quantitative research approach in collecting, analysing and interpreting data. The approach was preferred because the quantitative nature of data collected. A cross-sectional descriptive design was also employed because it allowed the collection of data within limited timeframe, making it feasible to conduct without disrupting school activities extensively.

3.2 Population and Sampling

The study was conducted in Northern region of Zanzibar and involved two districts, namely Northern 'A' district and Northern 'B' district. The study area was selected purposely, because of poor performance of some secondary schools in the National examination of CSEE for several years. The study population was secondary school teachers of Northern region in Zanzibar which consisted 80 respondents from six (6) selected secondary schools whereas both the higher performance schools and the lower performance schools were involved. The study used Non probability sampling techniques specifically convenience sampling. Mhando [15] asserted, that convenience sampling is the Non-probability sampling whereas the researchers utilize a sample which is readily available and accessible to them. Convenience sampling was useful in this study because it allowed the researcher to quickly and easily gather data from respondents who are readily available.

3.3 Data Collection

The study used questionnaires and observation instruments as tools of data collection. The Likert scale questionnaires with five points categories was used to assess the influence of candidates' item responses analysis on teachers' assessment practices in secondary schools in Zanzibar and non-participatory observation with Likert scale of three-point categories was used to examine common assessment practices applied by secondary school teachers**.** To establish the reliability of the instrument, the researcher used test-retest techniques. The test-retest technique involved measuring the individuals on the same instrument on different occasions and correlating the scores obtained by the same person on the two administrations (Mhando, 2022). The study employed a pilot study to administered the questionnaires, and the responses scored correlated by using Pearson moment product correlation coefficient to establish the extent to which the content of the questionnaire consistent in producing the same responses. As Orodho (1998), suggested that a correlation of 0.8 is be taken to be sufficient for the instrument to be accepted as reliable.

3.4 Data Analysis

The quantitative data were analyzed using the descriptive statistics (frequencies, mean, standard deviation and percentages) with the help of Statistical Package for Social Sciences (SPSS) version 20.0.

4. RESULTS AND DISCUSION

4.1 Candidates' Item Responses Analysis and Teachers' Assessment Practices

The objective was to examine the influence of Candidates' Item Response Analysis on assessment practices applied by secondary school teachers. The table shows the results of questionnaire from the respondents.

Table 2. Responses on candidates' item responses analysis and teachers' assessment practices

S/N	Statements	1	2	3	4	5	M	S. D
	Influence in the purpose of assessment							
1.	CIRA influence me in planning for instructions (objective, strengths & weakness, grouping)	**18**	14	14	18	16	3.00	1.458
2.	CIRA influence me in monitoring students' progress and provide feedback to the students	12	17	14	16	21	3.21	1.429
3.	CIRA influence me in preparing students for national examination	10	12	15	16	27	3.47	1.414
4.	CIRA influence me in determining the effectiveness of instructions	13	10	14	25	18	3.31	1.383
	Index of purpose of assessment						**3.247**	
	Influence in the methods of assessment							
1.	CIRA influence me in assessing students through classroom observation	17	16	14	18	15	2.98	1.432
2.	CIRA influence me in assessing students through group discussion	14	12	17	22	15	3.15	1.370
3.	CIRA influence me in assessing students through classroom exercises	13	13	12	18	24	3.34	1.466
4.	CIRA influence me in assessing students through home work	11	13	16	16	24	**3.36**	1.416
5.	CIRA influence me in assessing students through quizzes	14	13	16	16	21	3.21	1.447
6.	CIRA influence me in assessing students through oral questions	15	11	15	18	21	3.24	1.460
7.	CIRA influence me in assessing student multiple-choice questions	15	11	16	17	20	3.22	1.458
8.	CIRA influence me in assessing students writing true/ false questions	20	13	18	15	16	2.87	1.435
9.	CIRA influence me in assessing students fill in the blanks or short answers	17	16	21	12	14	2.87	1.381
10.	CIRA influence me in assessing students writing matching items	13	17	16	20	14	3.06	1.353
11.	CIRA influence me in assessing students individual class participation	13	13	19	21	14	3.11	1.322
12.	CIRA influence me in assessing student portfolios	21	17	13	18	11	2.76	1.416
13.	CIRA influence me in assessing students peer assessment	19	20	14	15	12	2.76	1.398
14.	CIRA influence me in assessing students project-based assessment	20	13	14	15	18	2.98	1.509
Index of methods of assessment							**3.065**	
Influence in the procedures of assessment								
1.	CIRA influence me in preparing your own assessment items, questions/ materials	14	13	15	19	19	3.20	1.427
2.	CIRA influence me in finding sources of your assessment items/questions.	14	16	14	18	18	3.13	1.426
3.	CIRA influence me in grading your students' scores.	10	12	18	17	23	**3.39**	1.373
4.	CIRA influence me in preparing students feedback and reporting.	15	12	17	18	18	3.15	1.424
Index of procedures of assessment					**3.217**			

Note: 1=somehow,2=Occasionally, 3= Regularly, 4= Frequently, 5= Always

Table 2, shows the influence of Candidates' Item Response Analysis on assessment practices applied by secondary school teachers. The results indicated that, regarding the purpose of assessment, Candidates' item responses analysis plays a significant role in influencing secondary school teachers to "prepare students for national examinations," with a mean score of (M=3.47). This was followed by the statement "determining the effectiveness of instructions," which had a mean score of (M=3.31). The statement "Influence in planning for instructions (objective, strengths & weakness, grouping)" received the lowest reaction, with a mean score of (M=3.00). However, the overall mean index for the purpose of the assessment was (M=3.247). The results indicated that Candidates' Item Responses Analysis had more influence secondary school teachers on preparing students for the national examination. In relation to the current study, [17]. On distractor analysis in multiple-choice of instructors written multiple-choice found that knowledge of item responses analyses helps teachers in preparing test items. Also, [20]. On their study about fundamental thinking and skills test using item responses theory, found that the item responses theory helps teachers to develop good test items. Therefore, the study shown that the knowledge of item responses analysis helps teachers in improving the assessment practices in preparing good test items.

Moreover, regarding the influence on methods of assessment, the results showed that the statement "influence in assessing students through homework" had the highest mean score of (M=3.36), followed by "influence in assessing students through classroom exercises" with a mean score of (M=3.34), and then "influence in assessing students through oral questions" with a mean score of (M=3.24). The lowest means were for "influence in assessing students through portfolios" and "influence in assessing students through peer assessment," both having the same mean score of (M=2.76). The overall mean index for methods of assessment was (M=3.065). This implied that Candidates' Item Responses Analysis had consistently influenced secondary school teachers in preparing students for national examinations, but it had little influence on assessing students through portfolios and peer assessment. In relation to the current study [21] on her study about the effectiveness of teachers' classroom assessment practice on providing pupils learning of English language in primary school revealed that teachers had little knowledge on the uses of portfolios as assessment tools since the method was less used by some teachers compared to other traditional assessment methods. And also, portfolio is not the easiest type of assessment to implement because it needs knowledge, time and resources to fulfil it.

In the last part concerning the procedure of assessment, the results showed that Candidates' Item Responses Analysis influenced secondary school teachers in grading students' scores with a mean score of (M=3.39), followed by "influence in preparing teachers' own assessment items, questions/materials" with a mean score of (M=3.20). The lowest was "influence in finding sources of assessment items/questions," with a mean score of (M=3.13). The overall mean index was (M=3.47), which implied that Candidates' Item Responses Analysis influenced secondary school teachers in preparing students for national examinations.

In general, the results indicated that Candidates' Item Responses Analysis influenced secondary school teachers in the purpose of assessment, with a mean score of (M=3.247), particularly in preparing students for national examinations, finding sources of assessment, and providing student feedback and reporting.

4.2 Common Assessment Practices Applied by Secondary School Teachers

The second objective of the study was to examine the common assessment practices applied by secondary school teachers. The information concerns about the common assessment practices applied by secondary school teachers were collected through questionnaire and observation, and both tools provided similar results as shown in Table 3 and Table 4.

Table 3 shows the results of the respondent concern to the common assessment practices applied by secondary school teachers. To analyze this objective, means of each item were computed. The results in the Table 3 indicated that *"Prepare students for national examination"* was the mostly practiced purpose of assessment with the mean score *(M=3.80).* This was followed by *"Monitoring students' progress and provide feedback to the students"* with the mean score *(M=3.37).* The statement *"To rank students*

based on their class performance" as the purpose of the assessment had the lowest with *(M=3.00).* Furthermore, the results indicated that the overall mean of the purpose of the assessment was *(M=3.29).* This result indicated that most secondary school teachers paid more attention to the purpose of preparing their students for the national examination.

On other the hand, the most method that secondary school teachers applied was *"Assessing students through quizzes"* with a mean score *(M=3.64).* This was followed by *"Assessing students through individual class participation* "with mean scores *(M=3.55*). And "*Assessing students through home work"* with mean scores *(M=3.51).* The least used method was *"Assessing students through project-based assessment"* with mean scores of *(M=2.90).* This meant that secondary school teachers always used quizzes as method of assessment, frequently used individual class participation, and rarely use project-based assessment. The results also shows that the overall methods of assessment had a mean score of *(M=2.98),* implying that secondary school teacher occasionally used method of assessment such as group discussion, classroom exercises and peer assessment, and used matching items, true/ false questions and through filling in the blanks or short answers less frequently. In the part of procedures of assessment, there were two aspects of assessment namely; source of assessment and feedback and reporting. The results indicated that, the sources of assessment frequently used by secondary school teachers were *"Past papers "*with a mean score of (M=3.61), followed by "*Text books* "with a mean score *(M=3.57)* and *"syllabus"* with a mean score *(M=3.54).* on the other hand, the lowest mean that was "*internet"* as the source of assessment with a mean score of (M=3.03), The overall mean index of source of assessment used by secondary school teachers was *(M=3.422)*. Which implied that secondary school teachers frequently used these varieties of sources of assessment.

On reporting and feedback, the results indicated that secondary school teachers always used *"Letter grading"* as the main reporting and feedback method with a mean score of *(M=3.69),* followed by *'Total test scores'* with a mean score of *(M=3.64).* The least used procedure of assessment for providing reporting and feedback was *"Verbal feedback"* with a mean score of *(M=3.26).* The overall mean index of reporting and feedback was *(M=3.482).* This result indicated that most of secondary school teachers always used varieties of reporting and feedback as the procedures of assessment. They always used letter grading and did not consider verbal feedback as an important part on reporting and feedback. In general, secondary school teachers always prepared students for the national examination as one of their assessment practices, with a mean score of *(M=3.80)* rather than other assessment practices. On the other hand, procedures of assessment were also preferred the most by secondary school teachers compared to other assessment practices. The overall mean index of procedures of assessment was *(M=3.448),* followed by the purpose of assessment with mean scores of *(M=3.29),* and the lowest mean was methods of assessment with a mean of *(M=2.980).* This result indicated that secondary school teachers did well in procedures of the assessment especially in the statement *"letter grading"* and *"past papers".*

Apart from questionnaire results, classroom observation was used to collect information on assessment practices applied by secondary school teachers. The observation results show similar findings as shown on the Table 4.

Table 4 shows the results from classroom observation. The observation results showed that in purpose of assessment, secondary school teachers effectively *'Prepare students for national examination'* with a mean score of *(M=2.83),* followed by *'Monitoring students' progress and provide feedback'* and *'Determine the effectiveness of instructions'* both with a mean score of *(M=2.33)* respectively. The lowest mean of the purpose of assessment was to *'rank students based on their class performance'* with a mean score of *(M=1.17).* Furthermore, the secondary school teachers preferred to use *quizzes* as assessment methods to assess the students with a mean score of (*M=2.83),* followed by *'homework'* and *'individual class participation'* both with the mean scores of *(M=2.33).* The lowest method of assessment was *'project-based assessment'* with a mean score of *(M=1.17*) [22].

The classroom observation results on the procedures of assessment contained two parts: sources of assessment and feedback and reporting. Regarding sources of assessment items, the results indicated that, majority of secondary school teachers used *past paper* as the sources of assessment with a mean scores

Table 3. A questionnaire result on common assessment practices applied in secondary school

S/N	Statements	1	2	3	4	5	M	S. D
	Influence in the purpose of assessment							
1.	Planning for instructions (objective, strengths & weakness, grouping)	12	18	18	13	19	3.11	1.396
2.	Monitoring students' progress and provide feedback to the students	11	11	16	21	21	3.37	1.372
3.	Preparing students for national examination	12	0	13	22	33	3.80	1.382
4.	Determining the effectiveness of instructions	12	9	21	19	19	3.30	1.354
Index in purpose of assessment							**3.247**	
Influence in the methods of assessment								
1	Assessing students through classroom observation	17	16	14	18	15	2.98	1.432
2	Assessing students through group discussion	14	12	17	22	15	3.15	1.370
3	Assessing students through classroom exercises	13	13	12	18	24	3.34	1.466
4	Assessing students through home work	11	13	16	16	24	**3.36**	1.416
5	Assessing students through quizzes	14	13	16	16	21	3.21	1.447
6	Assessing students through oral questions	15	11	15	18	21	3.24	1.460
7	Assessing student multiple-choice questions	15	11	16	17	20	3.22	1.458
8	Assessing student through writing true/ false questions	20	13	18	15	16	2.87	1.435
9	Assessing students fill in the blanks or short answers	17	16	21	12	14	2.87	1.381
10	Assessing students writing matching items	13	17	16	20	14	3.06	1.353
11	Assessing students individual class participation	13	13	19	21	14	3.11	1.322
12	Assessing student portfolios	21	17	13	18	11	2.76	1.416
13	Assessing students peer assessment	19	20	14	15	12	2.76	1.398
14	Assessing students project-based assessment	20	13	14	15	18	2.98	1.509
Index in methods of assessment							**3.065**	
Influence in the procedures of assessment								
	1) Sources of assessment item/question							
1.	Teacher's own materials	9	15	15	19	22	3.36	1.352
2.	Text books	9	10	16	16	29	3.57	1.385
3.	Past papers	8	9	14	24	25	3.61	1.307
4.	internet	16	13	19	17	15	3.03	1.396
5.	syllabus	10	11	13	16	30	3.54	1.423
	2) Feedback and reporting							
1.	Verbal feedback	12	13	16	21	18	3.26	1.385
2.	Written comments	10	12	16	25	17	3.34	1.312
3.	Total test scores (marks)	10	2	19	25	24	3.64	1.285
4.	Letter grading (e.g., A.B.C etc.)	10	4	15	22	29	3.69	1.346
Index of feedback and reporting							**3.482**	
Index of procedures of assessment					**3.448**			

Note: 1=somehow,2=Occasionally, 3= Regularly, 4= Frequently, 5= Always

Table 4. The classroom observation results about the common assessment practices applied by secondary school teachers

S/N	Statements	1	2	3	M	S. D
	Influence in the purpose of assessment					
1.	Planning for instructions (objective, strengths & weakness, grouping)	2	3	1	1.83	.753
2.	Monitoring students' progress and provide feedback to the students	1	2	3	2.33	.816
3.	Preparing students for national examination	0	1	5	2.83	.548
4.	Determining the effectiveness of instructions	1	2	3	2.33	.816
5.	To rank students based on their class performance	4	1	1	1.50	.837
Index in purpose of assessment					**3.29**	
Influence in the methods of assessment						
15	Assessing students through classroom observation	15	12	13	3.28	1.501
16	Assessing students through group discussion	11	10	13	3.44	1.377
17	Assessing students through classroom exercises	13	12	11	3.40	1.489
18	Assessing students through home work	9	14	12	3.51	1.414
19	Assessing students through quizzes	6	11	15	3.64	1.275
20	Assessing students through oral questions	11	15	19	3.18	1.329
21	Assessing student multiple-choice questions	17	13	12	3.11	1.475
22	Assessing student through writing true/ false questions	17	18	14	2.95	1.457
23	Assessing students fill in the blanks or short answers	15	15	17	3.04	1.391
24	Assessing students writing matching items	14	18	19	2.93	1.310
25	Assessing students individual class participation	0	16	19	3.55	1.018
26	Assessing student portfolios	17	11	17	3.07	1.430
27	Assessing students peer assessment	12	11	16	3.36	1.416
28.	Assessing students project-based assessment	14	21	18	2.90	1.356
Index of methods of assessment					**2.980**	
Influence in the procedures of assessment						
1)	**Sources of assessment item/question**					
1.	Teacher's own materials	9	15	15	3.36	1.352
2.	Text books	9	10	16	3.57	1.385
3.	Past papers	8	9	14	3.61	1.307
4.	internet	16	13	19	3.03	1.396
5.	syllabus	10	11	13	3.54	1.423
Index of sources of assessment items/questions					**3.422**	
2)	**Feedback and reporting**					
1.	Verbal feedback	12	13	16	3.26	1.385
2.	Written comments	10	12	16	3.34	1.312
3.	Total test scores (marks)	10	2	19	3.64	1.285
4.	Letter grading (e.g., A.B.C etc.)	10	4	15	3.69	1.346
Index of feedback and reporting					**3.482**	
Index of procedures of assessment				**3.448**		

Note: 1=Not used,2=Somehow used, 3= Effectively used,

of *(M=2.50)* followed by *text book* with a mean score of *(M=2.33)* and the lowest sources of assessment was *internet* with a mean scores of *(M=1.33).*On reporting and feedback , the results indicated that secondary school teachers effectively used feedback and reporting through *letter grading* and *total test scores(marks)* with the highest mean scores of *(M=2.50)* . this was followed by *written comments* with a mean score *(M=1.80),* and the lowest feedback and reporting was *verbal feedback* with a mean score of *(M=1.50).* Furthermore, the statement '*Prepare students for national examination'* and '*quizzes'* both had the highest mean scores of *(M=2.83)* compared to other assessment practices. This indicated that secondary school teachers effectively prepared students for national examination and administered quizzes as the assessment practices. In contrast, project-*based assessment* and *ranking the students based on their class performance* were the lowest assessment practice applied by secondary school teachers with a mean score of *(M=1.7*) Moreover, procedures of assessment also preferred as the most used assessment practices by secondary school teachers compared to other assessment practices [23]. The overall mean index of procedures of assessment was *(M=2.311)*, followed by the purpose of assessment with a mean score of (*M=1.943,)* and the lowest mean was methods of assessment with a mean of *(M=1.837)*. This result indicated that secondary school teachers performed better in procedures of the assessment than in purpose and methods of assessment. To conclude, there are similarity of the results between teacher's respondent and the observation results. For example, in the purpose of assessment teachers' responses questionnaire show that *"Prepare students for national examination"* was the mostly practiced purpose of assessment with a mean score of *(M=3.80),* and the statement *"To rank students based on their class performance"* had the lowest mean of (M=3.00). Similarly, to observation results which show that *'Prepare students for national examination'* had the highest mean compared to others, with a mean score of *(M=2.83)*. And the lowest mean of the purpose of assessment was to *'rank students based on their class performance'* with a mean score of *(M=1.17)*.

On other the hand, the results shows that both questionnaire and observation results had the same results on method of assessment, whereby the most assessment method used was "*quizzes* "with a mean score *(M=3.64)* in questionnaire and *(2.83)* in observation results. And lowest method of assessment was *"project-based assessment" with a mean score of (2.90)* in questionnaire and *(1.17)* in observation results*.* In the part of procedures of assessment, the results indicated that, *"Past papers* "had the highest mean in both tools as sources of assessment whereas in questionnaire had a mean score of (*M=3.61),* and *(2.50)* in observation, while *"internet"* was the lowest in both tools which had a mean score of *(3.03)* in questionnaire and *(1.33)* in observation. On reporting and feedback, *"Letter grading"* was the main reporting and feedback method in both tools with a mean score of *(M=3.69)* in questionnaire and *(2.50)* in observation results. And the least reporting and feedback was ***"****Verbal feedback"* with a mean score of *(M=3.26)* in questionnaire and *(1.50)* in observation. The overall results in both questionnaire and observation show that procedures of assessment were the most used assessment practice with a mean score of *(3.482)* in questionnaire results and *(2.311)* in observation results, while methods of assessment were the lowest assessment practice with a mean score of *(2.98)* in questionnaire results and *(1.837)* in observation [24,25].

5. CONCLUSION

The results shown that Candidates' item responses analysis influence secondary school teachers assessment practice to prepare students for national examination and determining the effectiveness of instructions, whereby Influence in planning for instructions (objective, strengths & weakness, grouping) had the lowest influence reaction. This implies that Candidates' Item Responses Analysis had more influence secondary school teachers on preparing students to pass national examination something which prompted that most of secondary school teachers usually base on the methods of preparing pupils for final examination as key reason for classroom assessment.

In general, the results indicated that Candidates' Item Responses Analysis influences secondary school teachers on purpose of assessment especial on preparing students for national examination, finding source of assessment and giving student feedback and reporting while portfolios, peer assessment and project-base assessment were lowest influence something

which led secondary school teachers not to applied them in assessment practices. Therefore, the government should provide more trainings for secondary school teachers so as to help them in better understanding of the proper usage of candidates' item responses analysis to adjust the assessment practices in secondary schools.

6. RECOMMENDATION

The following recommendations were derived from the findings and conclusions of the study;

1. Timely Delivery of Candidates Item Responses Analysis: The study recommends that the National Examination Council of Tanzania (NECTA) ensure timely delivery of candidates' item response analysis reports to all secondary schools in Tanzania. These reports are currently not reaching schools in the expected timeframe, which hinders their effective use. Prompt distribution will facilitate better use of the analysis in improving educational outcomes.

2. Adequate Distribution of Candidates' Item Response Analysis Copies; the study identified that many secondary schools in Zanzibar receive insufficient copies of candidates' item response analysis. This shortage leads to multiple teachers sharing a limited number of copies, thereby impeding effective assessment practices. NECTA should ensure that an adequate number of copies is distributed to each school to support teachers in implementing effective assessment practices.

3. Training for Modern Assessment Methods; The study found that many secondary school teachers do not utilize candidates' item response analysis to refine their assessment practices or incorporate modern methods such as portfolios and project-based assessments due to a lack of knowledge. It is recommended that the government provide additional training for teachers on these modern assessment practices to enhance their effectiveness and integration in the classroom

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during writing or editing of manuscripts.

CONSENT AND ETHICAL APPROVAL

In this study, the researcher adhered to all ethical issues relating to human rights such as informed consent as well as the national rules and regulations such as obtaining research permit from The Second Vice President Office of Zanzibar, The Ministry of Education of the Revolution Government of Zanzibar and the Office of the Chief Government Statistician of Revolution Government of Zanzibar who granted the research permit.

ACKNOWLEDGEMENTS

The authors wish to acknowledge the lecturers from the University of Iringa for their positive contributions on this paper.

COMPETING INTEREST

Author has declared that no competing interest existed.

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Peer-review history:
The peer review history for this paper can be accessed here:
https://www.sdiarticle5.com/review-history/121856