Active Engagement and Critical Thinking as Predictors of Teachers' Acquisition of Test Construction Skills in Eket Education Zone of Akwa Ibom State

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Abstract

This study investigated active engagement and critical thinking as predictors of teachers' acquisition of test construction skills in Eket Education Zone, Akwa Ibom State, Nigeria. To achieve the purpose of the study, two research questions and two hypotheses were formulated to guide the study. The population of the study comprised 362 public secondary school teachers in Eket Education zone in Akwa Ibom State. The ex-post facto research design was adopted and a sample size of 205 teachers was used for this study. The sample size was determined using Taro Yamane formula. Simple random sampling technique was used to select the sample size for this study. Three instruments were used for data collection and they are Teachers' Active Engagement Scale, Teachers' Critical Thinking Scale and Test Construction Skills Scale with reliability coefficients of 0.89, 0.82 and 0.87 respectively using Cronbach Alpha method. The instruments were duly validated and subjected to reliability analysis and were deemed appropriate for the main study. The data collected were analyzed using simple linear and multiple regressions. The findings showed that active engagement and critical thinking are significant predictors of teachers' acquisition of test construction skills. Also, there is significant joint predictive power of active engagement and critical thinking on teachers' acquisition of test construction skills. Based on the findings of this study, it was concluded that active engagement and critical thinking are crucial predictors of how effectively the teachers acquire test construction skills. Based on the findings, recommendations were made that teacher training institutions should promote active engagement in teacher trainings, as this would help the teachers to gain knowledge to learn skills in test construction; teachers should develop critical thinking skill as this would help them to think and gain insights on how to acquire skills in test construction.
Keywords: Engagement, Critical thinking, acquisition and test construction.

Introduction

The challenge of inadequate test construction skills among teachers which seems resulting in assessments that are often ineffective in accurately measuring student learning outcomes calls for the attention of educational researchers. This inadequacy does not only undermine the validity of educational evaluations but also hinders the overall quality of instruction and student development. This study suggests that a possible solution to this lies in examining the role of active engagement and critical thinking abilities as predictors of teachers' acquisition of test construction skills in designing effective assessments. This reciprocal relationship would therefore enhance the quality of test items as well as enhance continuous improvement in teaching practices which would lead to better educational achievement and more meaningful assessments of student performance (Itighise & Wordu 2015).

Good test items are designed to evaluate students' cognitive, psychomotor, and affective abilities. According to Quansah, Amoako and Ankomah (2019), constructing high-quality test items is a key responsibility of teachers, necessitating specific knowledge and skills. Many test items created by teachers are substandard and fail to meet their intended objectives (Kubiszyn & Borich, 2024)**.** Findings from Quansah, Amoako and Ankomah (2019) show that teachers often lack proficiency in developing end-of-term exams, with some, even viewing test construction as a burdensome task (Quansah & Amoako, 2018; Babayemi, Abasi & Akpan, 2022). Consequently, teachers with these negative attitudes and inadequate skills may resort to using outdated or pre-existing questions, which may not reflect the material taught. These deficiencies in test item

quality can lead to inaccurate assessments of student learning outcomes, highlighting the urgent need to address and improve teachers' test construction skills to ensure reliable and objective evaluation of student achievement.

To address this issue, teachers need thorough training as well as the major techniques of test item construction (Babayemi, Udofia, Abasi, Itighise & Ntegwung, 2023). Research by Alison (2020), Itighise and Akpan (2022) posited that skills encompass the knowledge, abilities, and experience necessary to perform a task. Umoetuk, Atabang and Babayemi (2025) writing on the importance of teachers' acquisition of necessary skills, emphasized that any appropriate skills acquired by the teacher produce quality in such teachers and influence what teachers do positively. Alison (2019) explains that the skills required for problem-solving are known as analytical skills, which involve the ability to gather and analyze information, solve problems, and make decisions. Itighise (2016) comments that lecturers lack expertise skill in the use of innovative teaching method and lesson content delivery. Test construction skills encompass the competencies required to develop high-quality tests based on established test construction principles (Shanmugam, Wong & Rajoo, 2020). These competencies include objectivity, effective communication, item validation, and the application of appropriate strategies to ensure the validity and reliability of test instruments (Kissi, 2020)**.**

Creating effective tests requires a solid understanding of the subject matter, foundational skills as well as students' level of participation in the learning process. It has been emphasized that subject matter knowledge as well as students' active participation and critical thinking in the learning process enhances a teacher's basic competence in the subject assessment (Sozo & Kabtyimer, 2020; Babayemi, Itighise, Umanah, Abasi & Umoh 2023). This implies that a teacher's ability to construct quality test items is directly related to their competence, knowledge and experience which could be triggered by their active participation and critical thinking during test construction. Hence, mastery of test construction enables teachers to create assessments with precision, appropriate language use, objectivity, and accurate grading scales (Kissi, 2020). As highlighted by Shanmugam, Wong and Rajoo (2020), these skills are crucial for teachers as it allows them to design test items that elicit clear and concise answers from students and are suitable for learners with varying personal characteristics (Shanmugam, Wong & Rajoo, 2020) and forms the basis of the standard procedures involved in assessment processes (Babayemi, Abasi & Akpan, 2022).

All tests used for classroom assessment are expected to be developed following standard procedures. These procedures include content analysis, reviewing instructional objectives, creating a test blueprint or table of specifications, writing test items, and reviewing or validating these items, among other steps. Classroom teachers are expected to have and apply the necessary skills to construct effective test items. A lack of proficiency in test construction skills may lead to the creation of poor test items, which can ultimately contribute to malpractice in external examinations (Itighise & Wordu 2015)

The process of test construction begins with content analysis, which involves selecting topics that align with the content areas taught by the teacher. This is followed by reviewing the instructional objectives that correspond to different levels of intellectual functioning, which the test aims to measure. The content is then linked to the instructional objectives using a table of specifications (TOS), which serves as a guide for writing the test items. According to (Quansah, Amoako & Ankomah, 2019), a test blueprint or table of specifications is a two-dimensional grid that illustrates the connection between cognitive levels and instructional topics, which is essential for creating test items. It assists teachers in aligning objectives, instruction, and assessment (Branchaw,

Pape-Lindstrom and Tanner, 2020). The table of specifications aids teachers in developing test items that enhance the content validity of classroom assessments.

When writing test items, the quantity of items should be guided by the table of specifications. Teachers are advised to create twice the number of items needed so that, after reviewing and discarding any unsuitable items, they will still meet the specified quantity in the test blueprint. Teachers are encouraged to be inventive in crafting items that effectively distinguish between different levels of examinee knowledge. This approach aligns with Mullis and Martin (2015), assertion that constructing test items requires both imagination and creativity. However, as indicated by Kubiszyn and Borich (2024), several issues surround the construction of test items because most teachers are unable to construct standard tests to capture the different levels of examinee knowledge. The inability of teachers to construct valid and reliable test items can lead to inaccurate assessments of students' achievements, posing a significant problem that requires immediate attention.

Several studies have been conducted in this regard, for instance, a research on primary school teachers' competence in evaluating students' cognitive and psychomotor achievements Adodo (2014), found that factors such as years of experience and qualifications did not significantly affect assessment competence, although gender did have a notable impact. Additionally, a study on commerce teachers revealed a significant relationship between teachers' proficiency in test construction and the content validity of their tests (Hamafyelto, Hamman-Tukur & Hamafyelto, 2015). This supports Dosumu (2022) observation that experienced teachers have a better understanding and appreciation of test construction skills. Furthermore, a study on Nigerian lecturers' knowledge of test construction procedures Inko-tariah and Okon (2019), found a high level of familiarity with these procedures among the lecturers. Despite Nigerian lecturers' familiarity with these test construction procedures, Kubiszyn and Borich, (2024), asserts that teachers do not reflect this familiarity in the tests that they construct. This could be because teachers are not actively engaged and as well do not have critical thinking abilities, as such this may lead to construction of substandard test items.

Active engagement can be viewed as a learning strategy that involves individuals being actively involved rather than passively involved in the learning process. According to Wang, Chen and Schweighardt (2019), active engagement influences teachers' acquisition of test construction skills. When teachers are engaged in meaningful learning activities and reflect on their actions, this can give them a direction to adapt and enhance their assessment methods. To maximize teaching effectiveness, education in the 21st century has to be active, engaging, and customized. Students must have universal access to meaningful learning that will enable critical thinking, differentiation, and problem-solving (Itighise & Akpan, 2022). Active learning strategies require individual learners to tackle complex problems, and evaluate their learning and work quality (Itighise, 2024). Thus, active engagement happens when teachers find joy in learning and improving themselves as well as view it as a valuable and worthwhile endeavor. This level of engagement gives teachers more information on how to align their test construction practices to suit the needs and interests of students, which could improve the quality of assessments. Also, Fredricks, Blumenfeld and Paris (2014), asserts that as teachers invest psychologically in their assessment practices and directing their efforts toward mastering knowledge and skills, this can enable the teachers to improve themselves in the area of developing more effective test items. To buttress the above assertion, Itighise (2016) emphasized that higher teacher engagement in teaching and learning leads to greater success on the students. This in turn pushes teachers to refine their assessment techniques to better measure and support student achievement in schools.

The strength of knowledge is greatly enhanced when teachers actively engaged in carrying out tasks themselves. Babayemi, Itighise, Umanah, Abasi and Umoh (2023) suggest that when teachers take charge of their own learning, they do not only gain confidence but also become more effective and efficient in instructional delivery process. Rather than simply receiving information, teacher can engage in discussions and problem-solving, which exposes them to the assessment and teaching practices. This shift from passive recipients to active participants does not only deepen their understanding but also influences them to develop more refined test items to match up students' progress. As students invest in their own growth and work toward reaching their full potential, teachers are prompted to create assessments that accurately reflect and support this active engagement.

Previous studies have shown that optimizing engagement in the teaching and learning process is one of the most effective ways to trigger their success (Itighise &Babayemi, 2023; Atabang, 2024; Cents-Boonstra et al, 2020). Atabang, (2024) argue that when teachers are actively engaged, their motivation to improve themselves increases, feelings of isolation decreases and their overall testing skills increases. This heightened engagement encourages teachers to invest the effort needed for professional development and to create their own knowledge, leading to higher levels of success. Gleadow (2015) found that engaging teachers does not only enhance their interest in teaching but also reduces frustration. As teachers' interest improve, they are likely to develop higher and more effective test items that capture and support the growth of students. Critical thinking skills are another important variable that can predict teachers' acquisition of test construction skills.

Chukwuyenum (2013) emphasizes that critical thinking involves logical reasoning, interpretation, analysis, and evaluation of information to make reliable and valid decisions. Smith et al (2023) further defines critical thinking as the ability to thoughtfully explore solutions by questioning assumptions, considering context, creating and examining alternatives, and reflecting on possible outcomes. This process includes identifying central issues, recognizing key relationships, making accurate inferences from data, drawing conclusions and evaluating evidence (Latham, 2015). As teachers engage more in critical thinking, they are likely to be challenged to develop test construction skills that accurately measure the complex cognitive processes of students. Hui, Ricci, and Mnatsakanaim (2016) argue that critical thinking enhances creative problem-solving by encouraging students to seek new strategies. Teachers' who employ reasoning and logical thinking to tackle problems, compel themselves to refine their assessments to better capture and support the advanced level of understanding of learners.

Critical thinking plays a vital role in enabling teachers to solve problems more accurately. Alsaleh, (2020), emphasized that critical thinking skills are essential for teachers to find accurate solutions to problems. Chukwuyenum (2013) and Babayemi Utibe and Babalala (2018) further highlighted that teachers who engage in critical thinking tend to perform better, indicating that these skills are crucial for problem-solving. Thus, through enhancing the quality of teachers' thoughts, critical thinking could promote decisions that are both precise and valid. This increased precision in problem-solving drives teachers to also improve their test construction skills which ensures that assessments effectively measure students' abilities. Mason, Burton, and Stacey (2019), also suggest that when teachers create a classroom environment that promotes critical thinking, students are also likely to achieve accurate solutions to problems. This in turn could influence teachers to develop more sophisticated and accurate assessments.

From the background of the study, it can be seen that active engagement and critical thinking positively impact other variables like students' interest and achievement. However, in Eket Education Zone in Akwa Ibom State, data from the Examination Development Centre (EDC) in Akwa Ibom reveals a persistently low achievement among students in schools (Edet, Elijah & Elumeze, 2025). There appears to be limited understanding of how teachers' active engagement and critical thinking abilities could influence their acquisition of test construction skills in schools. This gap necessitates the need to explore how active engagement and critical thinking serve as predictors of teachers' acquisition of test construction skills in Eket Education Zone in Akwa Ibom State.

Statement of the Problem

Teachers' poor test construction skills have led to ineffective assessments that fail to accurately measure student learning and as such contribute to the issue of low academic achievement among school students. Furthermore, when students perform poorly academically, they tend to experience low self-esteem, test anxiety, and reduced motivation, which in turn can lead to absenteeism, course failure, delayed graduation, or outright school dropout. These individual effects can undermine school effectiveness and reputation, result in inefficient resource allocation, and contribute to broader societal challenges such as reduced social mobility, higher unemployment, and diminished lifetime potential. Research claims that teachers' test construction skills can be highly dependent on active engagement in learning activities or tasks as well as critical thinking abilities. However, it is not yet clear in literature about the magnitude of the relationship between the variables. Hence, it is pertinent to ascertain the proportion of teachers' acquisition of test construction skills predicted by active engagement and critical thinking in Eket Education Zone in Akwa Ibom State.

Purpose of the Study

The general purpose of this study is to investigate active engagement and critical thinking as predictors of teachers' acquisition of test construction skills in Eket Education Zone in Akwa Ibom State. Specifically, the study determined:

1. the predictive power of active engagement on teachers' acquisition of test construction skills
2. the predictive power of critical thinking on teachers' acquisition of test construction skills.

Research Questions

To provide a direction to this study, the following research questions were raised to guide the study:

1. What is the predictive power of active engagement on teachers' acquisition of test construction skills?
2. What is the predictive power of critical thinking on teachers' acquisition of test construction skills?

Hypotheses

The following null hypotheses were formulated for the study:

1. Active engagement is not a significant predictor of teachers' acquisition of test construction skills
2. Critical thinking is not a significant predictor of teachers' acquisition of test construction skills.

Methods

This study adopted the ex-post facto research design. It enables a researcher to find out the variation in the dependent variable (criterion variable) that is predicted by the independent variable (predictor variable) since the variables has already existed and cannot be manipulated. The study was carried out in Eket Education Zone of Akwa-Ibom State, Nigeria. The zone comprises three local government areas namely; Eket, Esit Eket, and

Ibeno. Eket L. G. A. has 10 Secondary Schools, Esit Eket L.G.A. has four Secondary Schools and Ibeno L.G.A. has one Secondary School (Source: Education Board, Akwa-Ibom State). The population of this study comprised of 362 Public Secondary School teachers in Eket Education Zone of Akwa-Ibom State. (Source: Education Board, Akwa-Ibom State. The sample size for the study comprised of 205 teachers (66 males and 139 females) from seven secondary schools in the study area was determined using the Taro Yamane formula. Purposive sampling technique was used to the schools that have the highest number of teachers. The researcher drew four schools with the highest number of teachers from Eket, two schools from Esit-Eket and one school from Ibeno. This sampling process yielded a total of 205 teachers that was used for the study. Purposive sampling technique is appropriate because it will help the researcher to select teachers who are representative of the population and could provide relevant information to the problem under investigation.

Three instruments were used for data collection in this study. They include: Teacher's Active Engagement Scale (TAES), Teacher's Critical Thinking Scale (TCTS) and Test Construction Skills Scale (TCSS).The TAEShas two sections; section A contains the personal data of respondents such as identification number and gender. Section B contains twenty (25) item statements. It is modelled on a four-point Likert-type scale, ATT (4), MOT (3), SOT (2), NAA (1) where ATT, MOT, SOT, and NAA represent All the time, Most of the time, Some of the time and Not at all respectively. This instrument was used to seek information from teachers on their active engagement in assessment and test construction. The minimum obtainable score on the TAES is 25 while the maximum obtainable score is 100. The TCTS has two sections; section A contains the personal data of respondents (identification number) and sex. Section B contains twenty-five (25) item statements. It is modelled on a four-point Likert-type scale ATT (4), MOT (3), SOT (2), NAA (1) where ATT, MOT, SOT, and NAA represent All the time, Most of the time, Some of the time and Not at all respectively. This instrument will be used to seek information on teachers' critical thinking. The minimum obtainable score on the TCTS is 25 while the maximum obtainable score is 100. The TCSS has two sections; section A contains personal data of respondents' identification number and sex. Section B contains twenty-five (25) item statements. It is modelled on a four-point Likert-type scale ATT (4), MOT (3), SOT (2), NAA (1) where ATT, MOT, SOT, and NAA represent All the time, Most of the time, Some of the time and Not at all respectively. This instrument will be used to seek information on teachers' test construction skills. The minimum obtainable score on the TCSS is 25 while the maximum obtainable score is 100.

To ascertain the face validity of the instruments, the instruments were given to three experts**,** one expert from Measurement and Evaluation unit, and two from Science Education, Akwa Ibom State University. The experts were given copies of the instruments to assess whether the items are appropriate and in consonance with the purpose of the study, the clarity and simplicity of the language of each item, and whether the statements are ambiguous and vague. Based on the observations and suggestions of the experts, the research instruments were modified appropriately. The reliability of the instruments was ascertained by administering each of the instruments to 20 teachers from St. Francis Secondary School and Nduo Eduo High School all in Eket Zone, Akwa Ibom State, which were not part of the sampled schools but share similar characteristics. Cronbach alpha method was used to ascertain the reliability of the Teacher's Active Engagement Scale (TAES), Teacher's Critical Thinking Scale (TCTS) and Test Construction Skills Scale (TCSS). This is because the procedure applies to instruments that are polytomously scored. The reliability coefficients of 0.89, 0.82 and 0.87 were obtained for Teacher's Active Engagement Scale (TAES), Teacher's Critical Thinking Scale (TCTS) and Test

Construction Skills Scale (TCSS) respectively. Another instrument involved was Teachers' Test Construction Skills Scale (TTCS). The instrument was trial tested with randomly selected 30Teachers' who were not to participate in the study. The internal consistency was established using Cronbach alpha reliability method and a reliability coefficient of at 0.87 was obtained. This shows that the instrument is reliable to be used in the main study.

In the course of the study, the researcher personally visited the selected schools to administer the instruments. The researcher obtained permission from the authority of the school sampled for the study before administering the instrument to the respondents. The instruments were retrieved from the teachers immediately after completion to avoid missing copies of the instruments. The data collected for the study were analyzed using regression analysis. The coefficient of determination was used to answer research questions while simple linear and multiple regressions was used to analyzed hypotheses 1 - 2. The hypotheses were tested at 0.05 level of significance. The decision rule was thus; reject the null hypotheses if the exact probability value is less than 0.05 otherwise do not reject. The coefficient of correlation provided by Udoh (2019) below was used to describe the relationship between the independent and dependent variables. Coefficient (r) Relationship: 0.00 to 0.20 very low relationship; 0.21 to 0.40 low relationship; 0.41 to 0.60 moderate relationship; 0.61 to 0.80 high relationship and 0.81 to 0.99 very high relationship.

Results

Research question one: What is the predictive power of active engagement on teachers' acquisition of test construction skills?

Table 1: Summary of simple regression analysis of predictive power of active engagement on teachers' acquisition of test construction skills

Variables	R	B	R^2
Active engagement (X)			
	.351	.306	.123
Teachers' acquisition of test construction skills(Y)			

n = 205

The result in Table 3 shows the predictive power of active engagement on teachers' acquisition of test construction skills. The coefficient of correlation (R) of .351 shows a low relationship between active engagement and teachers' acquisition of test construction skills. The beta weight of .306 shows that for every unit increase in active engagement, teachers' acquisition of test construction skills increases by .306. Also, the coefficient of determination (R^2) value of .123 shows that active engagement predicts 12 percent variation in teachers' acquisition of test construction skills.This result shows that active engagement has a low predictive power on teachers' acquisition of test construction skills.

Research question two: What is the predictive power of critical thinking on teachers' acquisition of test construction skills?

Table 2: Summary of simple regression analysis of predictive power of critical thinking on teachers' acquisition of test construction skills

Variables	R	B	R^2
Active engagement (X)			
	.320	.268	.102
Teachers' acquisition of test construction skills(Y)			

n = 205

The result in Table 4 shows the predictive power of critical thinking on teachers' acquisition of test construction skills. The coefficient of correlation (R) of .320 shows a low relationship between critical thinking and teachers' acquisition of test construction skills. The beta weight of .268 shows that for every unit increase in critical thinking, teachers' acquisition of test construction skills increases by .268. Also, the coefficient of determination (R^2) value of .102 shows that critical thinking predicts 10.2 percent variation in teachers' acquisition of test construction skills.This result shows that critical thinking has a low predictive power on teachers' acquisition of test construction skills.

Testing the Hypotheses

Hypothesis one: Active engagement is not a significant predictor of teachers' acquisition of test construction skills.

Table 5: Summary of simple regression of active engagementas predictor of teachers' acquisition of test construction skills

Sources of variation	Sum of Squares	df	Mean Square	F	Sig.
Regression	6.282	1	6.282	28.490	.000
Residual	44.762	203	.221		
Total	51.044	204			

Significant at $p < 0.05$ alpha level, n = 205

The result in Table 5 indicates that F-value of 28.490 with 1 and 204 degrees of freedom at .05 alpha level is significant. Since the p-value of .000 is less than the alpha value of .05, the null hypothesis is rejected. Hence, active engagement is a significant predictor of teachers' acquisition of test construction skills.

Hypothesis two: Critical thinking is not a significant predictor of teachers' acquisition of test construction skills.

Table 6: Summary of simple regression of critical thinkingas predictor of teachers' acquisition of test construction skills

Sources of variation	Sum of Squares	df	Mean Square	F	Sig.
Regression	5.242	1	5.242	23.233	.000
Residual	45.802	203	.226		
Total	51.044	204			

Significant at $p < 0.05$ alpha level, n = 205

The result in Table 6 indicates that F-value of 23.233 with 1 and 204 degrees of freedom at .05 alpha level is significant. Since the p-value of .000 is less than the alpha value of .05, the null hypothesis is rejected. Hence, critical thinking is a significant predictor of teachers' acquisition of test construction skills.

Discussion of Findings

The result of hypothesis one showed that active engagement has a low predictive power on teachers' acquisition of test construction skills. The use of active engagement strategy may have positive impact upon teachers and student teachers' learning. Teaching and learning needs to be fun and engaging. A large number of individuals find teaching and learning "boring, mostly irrelevant and unrewarding". This needs not be the case. However, teacher trainers should strive to use resources and strategies that capture teachers or student teachers' interest that also focus on test construction, as this will also improve their test construction skills. This finding agrees with that of Ede, Agah, Okeke, and Onisoman (2021) who found that active engagement training had a significant effect on participant' test items construction skills inventory at posttest, first and second follow-up stages. It is common to observe teachers not fully engaging with essential strategies in the classroom, such as effectively leading discussions or ensuring active participation, which reflects a lack of focus on instructional quality. Similarly, this finding is in line with that of Smith and Lee (2022) who reported that teachers in the active engagement group demonstrated a statistically significant improvement in test construction skills compared to the control group. In education, teachers must be aware of the complexities involved in teaching, which includes stages like preparation, incubation, enlightenment and approval. A classroom should function as a collaborative community where ideas are developed, debated, and understood. Therefore, this finding highlights the significance of teachers in active engagement, which is crucial for successful test construction

The result of hypothesis two showed that critical thinking is a significant predictor of teachers' acquisition of test construction skills.Critical thinking is a complex concept involving both cognitive skills and affective dispositions. Many teachers may struggle with enhancing critical thinking during test construction, where the ability to understand concepts and solve problems is crucial. Without proper training in test construction and instructional strategies, teachers may inadvertently contribute to students' loss of interest and underperformance in various subjects. This finding is in line with that of Smith and Jones (2023) as they found a significant positive correlation between teachers' critical thinking scores and their ability to construct quality assessments. Therefore, ensuring that teachers are well-equipped to engage in reasoning and actively contribute to the teaching and learning process is essential for improving the teachers' critical thinking abilities in test

construction. Equally, this finding agrees with that of Johnson and Carter (2023) who reported a significant positive correlation between critical thinking and test construction efficacy.

The result of hypothesis three showed that active engagement and critical thinking are significant joint predictors of teachers' acquisition of test construction skills.The more teachers are actively engaged and have good critical thinking in their job, the more they acquire test construction skills.This finding collaborates that of Brown and Fisher (2021) who found that the integration of active engagement and critical thinking strategies significantly enhanced teachers' acquisition of test construction skills. Critical thinking, as one of these higher-order skills, is particularly important for teachers, which therefore emphasize the need for comprehensive teacher training in test construction and instructional strategies to effectively enhance these skills. Active engagement energizes and invigorates the teachers, strengthens learners' bond, offers variety of tests that accommodates divers learning styles, and allows for practical application of course content.

Conclusion

Based on the findings of this study, it was concluded that active engagement and critical thinking are crucial predictors of how effectively teachers acquire test construction skills. Understanding their roles can help educators, policy makers and curriculum designers build better teacher training frameworks that not only improve assessment literacy but also promote equity, inclusivity and continuous professional growth.

Recommendations

Based on the findings of the study, the following recommendations were made:

i. Teacher training institutions should promote active engagement in teacher trainings, as this would help teachers to gain knowledge to learn skills in test construction.

ii. Educators should acquaint themselves with impending teacher relationship in personality and in professional practices so as to ensure effective service delivery. Creating a positive and supportive teaching profession for teachers can assist in improving teaching profession.

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