

Teachers' Competence in Student Assessment with in Competency-Based TVET Education: A Case Study in Amhara Regional State, Ethiopia

Abuhay Mihret Asres¹, & Amare Sahile Abebe^{1*}

Department of Psychology, College of Education, School of Educational Science Bahir Dar University, Ethiopia

***Corresponding author:** Amare Sahile Abebe, Department of Psychology, College of Education, School of Educational Science, Bahir Dar University, Ethiopia.

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Abstract

This study assessed the competency of private TVET teachers in educational assessment within the Amara Region. mixed-methods approach included self-assessed surveys, a knowledge test on assessment, classroom observations involving 175 teachers and 14 assessors, and follow-up interviews with 5 teachers, 4 assessors, 5 students, 2 deans, and 1 assessment center coordinator. The Teacher 35 Assessment Competency Inventory Questionnaire, a modified four-option multiple-choice exam, 49 structured observation checklist, and 35 perceived practice five-point rating Likert scale question, and interview were used to collect the data. Descriptive analysis was done and reported using proportion, mean and standard deviation. One-sample t test and Pearson's correlation statistics were used for inference. Moreover, theme and content analysis were applied for qualitative study. Findings revealed that private TVET teachers in the Amhara region lacked verified competence in assessing student learning performance, failing to meet overall standards and specific assessment criteria. Despite this, teachers generally reported modest self-perceived practice across seven competency domains. Significant differences were noted between teachers with lower assessed competence and those with moderate self-perceived practice. The majority of teachers demonstrated poor performance on assessment criteria, highlighting low levels of assessment literacy. Professional support is essential to enhance teachers' competence in educational assessment practices.

Keywords: Competence Based Education, Assessment Literacy, Perceived Practice Observed Practice

Introduction

Background

Assessment plays a pivotal role in Competence Based Education (CBE), serving as a critical tool for enhancing the quality of teaching and learning. Trainers benefit from the ability to evaluate trainees' proficiency in professional tasks, offering valuable insights for improvement and providing mutual feedback to both learners and teachers [1]. In the specific context of Technical Vocational Educational Training (TVET), assessment is integral to processes such as obtaining college credit and ensuring access to further education [2, 3].

Becoming a TVET institution teachers requires competence across diverse domains, encompassing institutional, national occupational competence, and recruitment assessments [4]. However, the current landscape for private TVET teachers in Ethio-

pia exposes a gap in their education, particularly in the fields of business and health (ATVETB, in press). Graduates often lack exposure to both pre-service and in-service training related to students' educational assessments, along with essential teaching methodologies (ATVETB, in press). Governmental emphasis on evaluating teachers' competence leans more towards national occupational assessments than on their proficiency in teaching methodology and assessment [10]. This discrepancy underscores the necessity for a holistic approach to address teacher competence, bridging the gap between subject-specific expertise and effective teaching and assessment practices.

Assessors' methods and tools center on the assessment model employed, potentially influencing trainees' competence positively or negatively [5]. Recognizing the fundamental role of quality assessments in effective teaching and the learning process, this

study emphasizes the need for a comprehensive evaluation of teacher competence. The quality of assessment practices within the classroom directly correlates with the quality of learning experiences for students [6]. Thus, a significant understanding of assessment practices becomes authoritative in making a more effective and holistic approach to teacher training and development in the TVET context.

This study addresses the critical need for teachers to possess adequate assessment competence, acknowledging its profound influence on assessment quality and student competency [7]. Teachers Assessment Competence (TAC), encompassing the understanding of different assessment types, is essential for interpreting assessment data, engaging with students about their understanding, and setting meaningful learning goals [8].

Teachers are expected to demonstrate competence in various assessment-related responsibilities, including evaluating students' understanding, adapting curricula, organizing classroom layouts, and selecting suitable organizations for technical training [9]. However, a significant number of teachers lack the necessary information, skills, and effective assessment practices, leading to misconceptions about evaluating students' academic achievement [10]. Research consistently indicates a general weakness in TAC resulting in inaccurate assessments and potentially hindering students from realizing their full potential [11]. Studies in the Amhara National Regional State (ANRS), secondary school teachers often find it difficult to demonstrate competence in educational assessments, particularly across seven essential areas of educational assessment standards [12]. Similarly, preliminary investigations in Bahir Dar indicated poor-quality educational assessments by teachers. Research by Mertler & Campbell (2005) has highlighted the lack of teacher competence in practicing a variety of classroom assessment tasks. These findings underscore the critical need to address TAC to ensure accurate and effective assessment of students' learning outcomes [13].

Ethiopia, specifically in private TVET colleges (PTC) within the ANRS, is characterized by a notable scarcity of extensive studies on the effectiveness of teachers in assessing students' educational competence. Despite the abundant global research on this subject across primary, secondary, and higher education levels, Ethiopia faces a distinct lack of similar investigations. This gap is underscored by a report from the Ministry of Education, which emphasizes the insufficient attention given to teachers' educational assessment of students within PTC [14]. In response to this critical gap, a preliminary study has been initiated in PTC within the ANRS. This study focuses on evaluating TAC while delving into their perceived assessment practice (PAP) and observed assessment practice (OAP) within classrooms.

Recognizing the inadequacy of addressing teachers' competency in educational assessment within a CBE system, the researcher was inspired to undertake a study. The focus of this investigation was to evaluate teacher competence in competency-based assessment (CBA) specifically within Amhara PTC, with concentrated emphasis on the South Gondar Administrative Zone (SGAZ). The study aimed to comprehensively assess teachers' assessment literacy, and their PAP and OAP related to CBA, and explore the relationship between these dimensions. Additionally, the study emphasizes the importance of understanding how

teachers perceive, enact, and improve their students' educational assessments.

The information derived from this research is anticipated to offer valuable insights and assistance to students, teachers, assessors, colleges, as well as educational authorities such as Amara Occupational Competence Assessment and Certification Agency (AOCACA), Amara TVET Bureau (ATVETB), Federal TVET Agency (FTA), and others. The emphasis is on directing special attention to enhance teacher assessment competence. By addressing this competency gap, the researcher envisions a positive impact on the overall educational assessment practices in PTC.

Statement of the Problem

The competence of teachers in assessment is crucial for maintaining assessment quality and improving student proficiency [7]. However, research indicates a widespread lack of AL among teachers, resulting in inaccurate assessments that hinder students from realizing their full potential [11]. This deficiency in assessment competence poses significant risks for teachers, students, colleges, and the country.

In Ethiopia, teachers in PTC often lack adequate training in assessing student competency [15]. Graduates in business and health fields have not received pre-service or in-service education in assessment or teaching methodologies (ATVETB, in press). Unlike secondary school teachers who undergo various educational assessment training programs, PTC teachers are not mandated to acquire teaching methodology and assessment competency skills. Additionally, the government prioritizes teachers' competence in national occupational assessments over teaching and assessment practices [15].

Before proposing interventions to enhance teachers' assessment skills at the regional level, comprehensive assessment is necessary. Specifically, there is a need to evaluate the competence of PTC teachers in educational assessment within the ANRS. The absence of educational assessment training programs for private TVET college teachers highlights the urgency of assessing their competency levels in this area [15].

Unlike previous studies conducted in Ethiopian PTC that primarily focused on secondary schools, our research explores uncharted territory. Specifically, we examine the Assessment Literacy (AL) of teachers in private TVET colleges, a domain that has not been extensively studied before. We also highlight the distinctive approach to assessment adopted by PTC compared to government colleges. Many teachers in PTC lack formal training in assessment and methodology, a gap we aim to address in our study. Furthermore, our research transcends mere theoretical exploration by incorporating OAP and PAP among teachers, a dimension not thoroughly explored in previous studies.

While extensive studies on teacher assessment literacy exist globally, there is a noticeable lack of research on the effectiveness of private TVET college teachers in Ethiopia, particularly within the ANRS. Despite the Ministry of Education's recognition of the insufficient focus on educational assessment in TVET colleges, no significant studies have been conducted in this area. Therefore, a preliminary study has been initiated in

private TVET colleges within the ANRS to evaluate teachers' AL, PAP, and OAP. This study aims to support and enhance TAC, addressing the following research questions:

Research Questions

In light of the background information and the problem statement presented above, this study aims to investigate the following research questions:

1. What are the perceived practices of teachers regarding educational assessments of students?
2. What is the level of assessment literacy among teachers in educational assessment of students?
3. What are the observed practices of teachers in educational assessments of students?
4. Is there a significant correlation between assessment literacy, perceived practices, and observed practices among private TVET teachers?

Methods and Material

The mixed methods research design combines quantitative and qualitative methodologies to gain a deeper understanding of research problems, offering a more comprehensive insight than

using either approach alone. For this study, the sequential explanatory strategy was chosen.

Population

The total study population included 210 teachers from 7 private TVET colleges, 20 assessors from 8 industries and companies, 12 deans, and 12 assessment center coordinators from these colleges.

Sampling

The quantitative study group comprised 175 private TVET teachers from various colleges and 14 assessors from both private and governmental industries and companies in the ANRS, Ethiopia. The qualitative research involved five teachers, four assessors, five students, two deans, and one assessment center coordinator. Convenience sampling was employed to select participants for the qualitative component.

Characteristics of Participants

The quantitative study group consisted of 189 private TVET teachers and assessors employed in various colleges and industries. Additionally, the qualitative phase involved five teachers, four assessors, five students, two deans, and one assessment coordinator.

Table 1. Demographic Characteristics of the Quantitative Study Participants.

Variable	Category	Frequency	Percentage
Gender	Female	30	15.87
	Male	159	84.13
Experience	1– 3	27	14.29
	4– 6	57	30.16
	7 –9	57	30.16
	10 - 12	48	25.4
Level of education	Level 4	84	44.44
	BA/BSC	84	44.44
	MA/MSC	21	11.11
Department	Nursing	63	33.33
	Accounting	30	15.87
	Pharmacy	27	14.29
	Laboratory	27	14.29
	Database	42	22.22

In Table 1, socio-demographic information, including sex, teaching experience, educational level, and department of the participants, is presented. Data were obtained from a total of 189 participants, and the analysis was conducted using the complete dataset from all 189 participants. Socio-demographic findings indicate that the largest proportion of respondents (33%) belonged to the nursing department. Regarding gender distribution, the majority of participants were male (84.13%). In terms of educational qualifications, an equal percentage (44.44%) of participants held Level 4 and BA/BSC degrees. Concerning teaching experience, the majority (60.32%) reported having four to nine years of service in educational institutes.

Data Collection Procedures

Participants were offered tools in either English or Amharic based on their readiness and English language proficiency.

Questionnaires and interviews were administered in person at their respective colleges or workplaces. Structured observation checklists were used to observe the assessment process during daily instruction and classroom assessments. Prior to administering the tools, the study's objectives, directions, and goals were explained to participants, emphasizing confidentiality and the use of data solely for research purposes.

Instrumentation

Survey research was used to gather data to answer the research objectives. Questionnaires, interviews, and observation checklists were used to collect data from the participants. An assessment competence inventory was used to determine the AL levels of teachers at PTC. In addition, a five-point Likert scale questionnaire and observation checklists were used to analyze teachers' PAP of their OAP concerning the basic CBA prem-

ise. The last semi-structured interview was used to triangulate the results of the questionnaire. The interviews, ranging from 40 to 75 minutes per participant, were conducted over a span of 15 days. Prior to the interviews, participants signed consent forms. Three distinct types of questionnaires were employed: the Teacher Assessment Questionnaire, comprising 35 closed-ended items to measure teachers' knowledge across seven competency areas; the Teachers' Self-Perceived Assessment Practice Questionnaire, with 35 closed-ended items to assess teachers' PAP in the seven competency areas; and the Teachers' Assessment Practice Observational Checklists Questionnaire, including 49 closed-ended items to evaluate teachers' actual assessment practices in the classroom. The design of the questionnaires drew inspiration from the "Standards for Teacher Competence in the Educational Assessment of Students," collaboratively developed by the American Federation of Teachers (AFT), the National Education Association (NEA), and National Council on Measurement in Education (NCME) in 1990. The AFT, NCME, and NEA (1990) standards served as the foundation for creating three distinct measures. Four multiple-choice questions were generated for each competency area, resulting in a 35-item multiple-choice test for assessing teacher AL. In adapting these items, 15 were sourced from Phye's (1996) "Handbook of Classroom Assessment: Learning, Adjustment, and Achievement," while an additional 20 were drawn from Brookhart's (2011) and Gray's (1997) lists of Educational Assessment Knowledge and Skills for Teachers. Furthermore, the Assessment Literacy Inventory (ALI): Test, developed by Mertler and Campbell in 2005, was adapted and utilized by Al-Bahlani in 2019 [16-18]. The questionnaires featured a four-option multiple-choice response format for competence assessment, a five-point Likert scale for self-perceived assessment practices (ranging from 1 for not observed to 5 for excellent), and a five-point Likert scale for the assessment practice observation checklist (ranging from 1 for not observed to 5 for always). The reliability coefficients for these instruments, assessed through the Spearman-Brown method, were .59, .67, and .89, respectively, surpassing values reported by Plake et al. (1993). To strengthen the questionnaires' validity, interviews were conducted. Firstly, the questions, along

with the interview query, were reviewed by six experts to ensure appropriateness. Secondly, a pilot test involving ten teachers was conducted. The interviews sought to enhance the questionnaires' validity and gain valuable insights into teachers' opinions on assessment practices.

Data Analysis

In the first teacher AL questionnaire, the responses to the 35 multiple-choice questions were coded as 0 if they were incorrectly answered and 1 if they were correctly answered. Second teachers self-PAP survey questioner of a five-point rating Likert scale, one for never used and five for always used, to rate teachers PAP. Thirdly, we used a structured observation checklist with a five-point Likert scale, one for not being observed and five for excellent, to rate teachers' OAP. The data were entered into a computer and analyzed using SPSS version 26 for Windows. Thematic and content analysis were used for follow-up interviews. Missing-value cases were ignored throughout the procedure and left out of the analysis. Descriptive analyses were used to describe the result of the teacher's ALI questionnaire test to identify correctly responded students and those who did not correctly respond to and understand the overall competence of the whole group of respondents. The results of each of the seven standards or levels of competency were examined using descriptive analysis and statistical test analysis for the assessment inventory of AL questioners, PAP questioners, and OAP structured observation checklists. The Pearson correlation coefficient was used to assess the relationship between the AL, PAP and OAP.

Results

Teachers' PAP of Students' Educational Assessment

The first objective of the study was to examine teachers' PAP of students' educational assessments. The assessment contained seven assessment competency areas of self-PAP of students' educational assessments. Thirty-five questionnaire items with a five-point Likert scale were designed and presented to the teachers to assess their self-PAP in the educational assessment of students. To do this t-test was computed and the results are presented in Table 2.

Table 2. Means, Standard Deviations, and One Sample t-test of Teachers' PAP of Students' Educational Assessment

Competency area	Mean	SD	Test value	t-test	sig
Choosing assessment methods	11.84	5.13	12	-.439	.661
Developing assessment methods	18.46	10.17	21	-3.44	.001
Administering, scoring, and interpreting Assessments	19.24	5.93	18	2.87	.005
Using Assessments for Decision-Making	18.31	9.61	15	4.74	.001
Using assessments for grading	13.72	7.45	12	3.17	.002
Communicating assessment results	12.036	3.42	12	.128	.889
Recognizing unethical practices	16.31	4.41	15	4.06	.001
Total perceived practice	109.90	27.50	105	2.45	.015

N = 189, t-test is significant at 0.05

In Table 2, the results of a one-sample t-test revealed that the mean value of teachers' competency in selecting assessment methods was lower than the mean test value ($M=11.84$, $SD=5.13$, $t=-0.439$, $p > .05$), the t-value was not statistically significant. This suggests that teachers perceive their competency in select-

ing assessment methods at an average level within the realm of assessment competence. Similarly, the results of a one-sample t-test indicated that the mean value of teachers' competency in developing assessment methods was significantly lower than the mean test value ($M=11.46$, $SD=10.17$, $t=-3.44$, $p < .01$), with

a significant t-value. This indicates that teachers perceive their competency in developing assessment methods at a lower level within the domain of assessment competence. Additionally, the mean value of teachers' competency in communicating assessment results was lower than the mean test value ($M=12.04$, $SD=3.42$, $t=0.889$, $p > .05$), and the t-statistic was not significant, suggesting an average level of perception in the execution of assessment competence in this particular area.

On a different note, the results of a one-sample t-test demonstrated that the mean value of teachers' competency in administering, scoring, and interpreting assessments was significantly higher than the mean test value ($M=19.24$, $SD=5.93$, $t=2.87$, $p < .01$). Similarly, the mean value of teachers' competency in using assessments for decision-making was significantly higher than the mean test value ($M=18.31$, $SD=9.61$, $t=4.74$, $p < .01$). Likewise, the mean value of teachers' competency in using assessments for grading was found to be significantly higher than the mean test value ($M=13.72$, $SD=7.45$, $t=3.17$, $p < .01$). Correspondingly, the mean value of teachers' competency in recognizing unethical practices was significantly higher than the mean test value

($M=16.11$, $SD=4.44$, $t=4.06$, $p < .01$), indicating a relatively higher level of perception in executing assessment competence in these specific areas.

Overall, although the mean value of teachers' total PAP was significantly higher than the mean test value ($M=109.90$, $SD=27.50$, $t=2.45$, $p < .05$), the t-statistic was significant. This implies that teachers' overall PAP of CBA in their college is at a relatively higher level.

Teachers' AL in the Seven Competency Areas of Educational Assessment of Students

The second objective of the study was to inspect teachers' AL. The assessment contained seven assessment competency areas. The test consisted of 35 multiple-choice items, and there was only one correct answer from the four alternatives given. Each teacher received one point for the correct answer to each question. The number of teachers who participated in this study was 189. The results were computed using one sample t-test and presented in Table 3.

Table 3. Means, Standard Deviations, and one Sample T-test of Teachers' AL

Assessment Literacy	Mean	SD	Test value	t-test	sig
Choosing Assessment Methods	1.6	0.9	1.5	1.4	0.163
Developing Assessment Methods	0.96	0.74	2	-19.3	0.001
Administering, Scoring, and Interpreting Assessments	1.91	1.21	3.5	-17.1	0.001
Using Assessments for Decision-Making	1.37	1.22	3.5	-24.07	0.001
Using Assessments for Grading	0.89	0.94	2.5	-23.52	0.001
Communicating Assessment Results	0.9	0.89	1.5	-9.15	0.001
Recognizing Unethical Practices	1.1	1.15	3	-22.79	0.001
Total Assessment Literacy	8.71	3.48	17.5	-34.67	0.001

N = 189, t-test is significant at 0.001

In Table 3, the results of a one-sample t-test confirmed that although the mean value of teachers' competency in choosing assessment methods was moderately higher than the mean test value ($M=1.60$, $SD=0.92$, $t=1.40$, $p > .05$), the t-value was not significant. This suggests that teachers' competency in choosing assessment methods as average in performing AL.

On the other hand, the results of a one-sample t-test determined that the mean value of teachers' competency in developing assessment methods was significantly lower than the mean test value ($M=.96$, $SD=.74$, $t=-19.30$, $p < .001$). Similarly, the mean value of teachers' competency in administering, scoring, and interpreting assessments was found to be significantly lower than the mean test value ($M=1.91$, $SD=1.21$, $t=-17.10$, $p < .001$). The mean value of teachers' competency in using assessments for decision-making was also significantly lower than the mean test value ($M=1.37$, $SD=1.22$, $t=-24.07$, $p < .001$). Correspondingly, the mean value of teachers' competency in Using Assessments for Grading was significantly lower than the mean test value ($M=0.89$, $SD=0.94$, $t=-23.52$, $p < .001$). Likewise, the mean value of teachers' competency in communicating assessment re-

sults was significantly lower than the mean test value ($M=0.90$, $SD=0.89$, $t=-9.15$, $p < .001$). In the same way, the mean value of teachers' competency in recognizing unethical practices was significantly lower than the mean test value ($M=1.10$, $SD=1.15$, $t=-20.79$, $p < .001$). The mean value of teachers' overall cumulative AL was lower than the mean test value ($M=8.71$, $SD=3.48$, $t=-34.67$, $p < .001$). The t-statistic was found to be significant. This indicates that teachers' overall AL is at a lower phase in employing assessment competence in private TVET colleges. From the results above, it is possible to demonstrate that teachers of TVET unexpectedly have low AL in the country.

Teachers' OAP of Students' Educational Assessment

The third objective of this study was to assess teachers' observed practice in seven areas of students' educational assessment. To attain this one sample t-test was run and the results are presented in Table 4. 49 items of the checklist ranging from 1= being not observed to 5 = being excellent in the observation session to see how effectively teachers conduct assessments of the OAP of students' educational assessment in the classroom.

Table 4. Teachers' OAP in Seven Areas of Students' Educational Assessment

	Mean	SD	Test value	t value	sig
Choosing Assessment Methods	11.99	2.40	15	-17.28	.001
Developing Assessment Methods	7.95	.79	21	-225.10	.001
Administering, Scoring, and Interpreting Assessments	16.91	4.02	36	-65.14	.001
Using Assessments for Decision-Making	14.87	6.20	24	-20.23	.001
Using Assessments for Grading	8.33	4.52	12	-11.14	.001
Communicating Assessment Results	14.31	6.85	24	-19.44	.001
Recognizing Unethical Practices	11.54	2.78	15	-8.23	.001
Total observed	85.90	21.68	147	-38.74	.001

N = 189, All t values are significant at $P < 0.001$

In Table 4, the results of a one-sample t-test revealed that the mean value of teachers' OAP in choosing assessment methods was significantly lower than the mean test value ($M=11.99$, $SD=2.40$, $t=-17.28$, $p < .001$). This indicates that teachers' OAP of choosing assessment methods for students' educational assessment was low in the OAP. Similarly, the results of a one-sample t-test discovered that the mean value of teachers' OAP in developing assessment methods was significantly lower than the mean test value ($M=7.95$, $SD=.79$, $t=-225.10$, $p < .001$). Likewise, the mean value of teachers' OAP in administering, scoring, and interpreting assessments was found to be significantly lower than the mean test value ($M=16.91$, $SD=4.02$, $t=-65.14$, $p < .001$). Correspondingly, the mean value of teachers' OAP in using assessments for decision-making was also significantly lower than the mean test value ($M=14.87$, $SD=6.20$, $t=-20.23$, $p < .001$). Respectively, the mean value of teachers' OAP in using assessments for grading was significantly lower than the mean test value ($M=8.33$, $SD=4.52$, $t=-11.14$, $p < .001$). Consistently, the mean value of teachers' OAP in communicating assessment results was significantly lower than the mean test value ($M=14.31$,

$SD=6.85$, $t=-19.44$, $p < .001$). Equally, the mean value of teachers' OAP in recognizing unethical practices was significantly lower than the mean test value ($M=11.54$, $SD=2.78$, $t=-8.23$, $p < .001$). Consistently, the mean value of teachers' overall cumulative OAP of students' educational assessment was significantly lower than the mean test value ($M=85.90$, $SD=21.68$, $t=-38.74$, $p < .001$). This shows that teachers' cumulative students' education assessment is at a lower OAP level. The findings dictate that it is conceivable to corroborate that teachers of TVET have an astonishingly low OAP of students' educational assessment in the TVET institutes.

Relationship Between Teachers PAP, AL and OAP of Students' Educational Assessment.

The fourth objective of this study was to examine whether there exists a significant relationship between teachers PAP, AL and OAP of students' educational assessment of TVET teachers. To attain this Pearson correlation coefficient was conducted and the results are presented in Table 5

Table 4. Teachers' OAP in Seven Areas of Students' Educational Assessment

	Variables	Mean	SD	Correlation coefficient		
				1	2	3
1	Assessment literacy	8.71	3.48	1		
2	Perceived practice	109.90	27.67	.524**	1	
3	Observed practice	97.15	23.32	.716**	.276**	1

N = 189, correlation is significant at .01

As indicated in Table 5, there was statistically significant correlation between AL and PAP ($Y = .524$, $p < .001$). Likewise, there existed statistically significant positive correlation between AL and OAP ($Y = .716$, $p < .001$) and statistically significant correlation observed between PAP and OPA ($Y = .276$, $p < .001$). These findings show that the three facets of teachers' assessment competence are interrelated.

Interview Result

The interview aimed to assess teachers' AL, PAP, and OAP in a CBA among teachers at private TVET colleges. Additionally, it sought to understand how teachers perceive, practice, and enhance students' educational assessments. The thematic and

content analysis of the interview findings brings to light several crucial aspects of teachers' assessment practices.

The results reveal differences between the self-PAP of TVET teachers and the outcomes of an assessment knowledge inventory test. Moreover, a disparity is evident between these self-PAP and the OAP of these teachers. Both the knowledge inventory test and observed practices point to a poor level of teachers' competence, whereas the perceived practice indicated a modest level of competence.

Teachers in the study exhibit a lack of competence in educational assessments, encompassing both traditional and compe-

tency-based methods. They engaged in traditional assessments like assignments, group projects, true-false, matching, multiple-choice, and quizzes without a proper assessment approach, but often overlooked essential methods such as continuous assessments, practical assessments, observation, 360-degree feedback, final exams, and midterms. This deficiency is attributed to the absence of pre-service, in-service, and continuous professional development training in teaching methodology and educational assessment of students. Furthermore, the reuse of test items over multiple academic years was a predominant practice, aggravated by the absence of regular assessment-related meetings and a lack of criteria and support from the college.

Interviewees, including deans, students, instructors, assessors, and assessment center coordinators highlight a significant misconception regarding CBA principles. During the interview, an instructor shared,

"I believe I misunderstood CBA, deviating significantly from its principles. It seems that my colleagues, college administrators, and even TVET professionals held similar misconceptions. We never received any guidance on assessment or instructional strategies. I sincerely apologize for the numerous mistakes I've made in this regard."

Participants acknowledge a lack of instruction on assessment or instructional strategies, leading to various mistakes in understanding and implementing the CBA. Students report not being graded based on adherence to CBA principles, further emphasizing the deviation from CBA beliefs in assessment procedures.

Furthermore, the study reveals a disconnect between the missions and goals of colleges, which predominantly prioritize fundraising, expanding capacity to accommodate more students, and promotion, rather than addressing the imperative need to enhance teachers' assessment competence. Despite this awareness, no concrete actions are taken to improve the assessment competence of teachers.

According to a dean's opinion, "The institution's mission and objectives were primarily focused on fundraising and expanding the college's capacity to admit more students, rather than prioritizing efforts to enhance teachers' assessment competency.

Mistakes in student assessments were predominant, with all learners being considered competent regardless of their competence levels. Teachers' lack of understanding of AL, valid and reliable assessments, and quality assessment characteristics negatively impact students' motivation, engagement, and overall competence. The study demonstrates instances of students resorting to unethical practices, such as copying answers, to navigate assessments.

An Assessor Respondent Shared

"Six years ago, there was an applicant for the National Occupational Competence Assessment (NOCA) Level Four in the accounting and finance department. Although she applied for the position, she lacked the necessary competence for Level Four accounting and finance at NOCA. In an attempt to obtain the NOCA assessment tool through unethical means, she resorted to copying answers provided by someone else. Despite three un-

successful attempts to obtain her version of the assessment tools, on the fourth try, she managed to secure the necessary tools and successfully cheated her way through the assessment, ultimately obtaining the certificate. This illegal certificate enabled her to continue her undergraduate education. Today, she has successfully earned her first degree in accounting and finance and is gainfully employed in an Ethiopian commercial bank."

Participants stressed the need for a multifaceted approach to improve teachers' assessment competence, encompassing pre-service, in-service, and continuous professional development. Raising awareness among college owners, leaders, and regulatory bodies about potential misunderstandings regarding teachers' assessment competence is crucial. Another viewpoint suggested adopting assessment methods used by teachers in Ethiopian Orthodox Church education. Additionally, it advocated for establishing a strong ethical framework for assessments among TVET teachers to enhance assessment competence in the context of CBE.

A Teacher Respondent Articulated

"In the Ethiopian Orthodox Church's educational system, students actively engage in learning, and teacher-student interaction is predominantly centered around assessment purposes. The learning pace varies, with some students completing their studies in a year, while others may take up to ten years. Self-assessment and peer assessment are common practices, and public criticism of incompetent students is considered part of the learning process. Remarkably, teachers can evaluate up to 50 students individually per day without compromising integrity, making it economically feasible to teach up to four thousand students. To enhance the assessment competence of TVET teachers in CBE, it is recommended to embrace the assessment methods employed by church education teachers, foster a robust ethical framework for assessments among TVET educators, and adapt the church's educational system for TVET education."

In conclusion, the interview findings emphasize the urgent need for comprehensive interventions to address the shortcomings in TVET teachers' assessment practices and competence. The study highlights the potential consequences for students' competency and the overall quality of private TVET education in the region. It calls for prioritizing assessment competence in professional development courses to alleviate these challenges and ensure the alignment of assessment practices with competency-based principles.

Discussion

The significance of educational assessment in the classroom, as emphasized by Mertler and Tanujaya, emphasizes its essential role in influencing student academic motivation and performance [19, 20]. Teachers' AL and beliefs are crucial influencers of their assessment practices, with undesirable attitudes potentially compromising the quality of assessment results (Coombe et al., 2012). Therefore, it's crucial to fully understand teachers' PAP, AL, and OAP about educational assessment [14].

The study's results indicated that teachers generally PAP their assessment practice as moderately competent in student assessment ($M = 3.14$, $SD = .86$). This study is consistent with the results from earlier research by Mertler (2003), Mertler & Campbell (2005).

In the other case a assessment knowledge is a crucial competency for teachers, essential in the preparation and implementation of assessments that not only align with learning objectives but also offer students meaningful feedback. According to Amua-Sekyi et al. (2016), this literacy involves the ability to develop reliable assessments, administer them, and score them, thereby facilitating valid instructional decisions by state or provincial educational standards [21, 22]. Unfortunately, our study reveals a deficiency in teachers' knowledge of assessment, with an average score of 8.71 out of 35 items (24.89 % correct) across all seven areas measuring students' educational competence. These findings align with prior research that consistently reports sub-par levels of teacher AL [23-25].

Similarly OAP, revealing lower competence levels in OAP ($M = 1.98$, $SD = .49$). This corroborated with findings from studies by Al-Bahlani (2019), Koh et al. [26].

The relationship between TVET teacher AL, PAP, and OAP skills. The results indicate that there is a statistically significant positive correlation between AL and PAP ($r = .524$, $p < .001$), between AL and OAP ($r = .716$, $p < .001$), and between PAP and OAP ($r = .276$, $p < .001$). These findings indicated an interrelation among the three aspects of teachers' assessment competence. The interview findings suggest that teachers' assessment competence is perceived to be modest, with low levels of assessment literacy and practice, and it noted that this AL impacts students' motivation to learn, and engage, and affects their overall competence. This finding is consistent the results of other studies [27].

In the last interview findings supported the quantitative data, indicating that teachers' assessment competence is perceived as modest, impacting students' motivation, engagement, and overall competence. The low level of AL and OAP emphasizes interventions, highlighting their essential role in teachers' assessment competence.

Teachers' assessment practices significantly influence the student learning experience, affecting not only their perceptions of learning but also future learning efforts [28]

This thematic finding emphasizing teachers' shortcomings in educational assessments. This encompasses a lack of comprehension in AL, valid and reliable assessments, and the end quality assessments. Particularly, there is a shortage of awareness regarding inappropriate assessment practices, deficiencies in designing effective assessment instruments, selecting suitable assessment techniques, and effectively communicating results to students. Moreover, the analysis highlights an inadequate understanding of CBA quality principles. This aligns with previous studies [23, 24].

he study recommended a multifaceted approach, incorporating pre-service, in-service, and continuous professional development to enhance teachers' assessment competence. Adopting assessment methods used by Ethiopian Orthodox Church education teachers and fostering an ethical framework for assessments among TVET teachers could enhance their competence in CBE. It stresses the importance of assessment competence

for teachers to ensure quality education, prevent inadequately designed assessments, and promote effective use of assessment data for improved student outcomes [28, 29] In conclusion, the study calls for a concentrated effort to address the deficiencies in teachers' assessment competence for the benefit of student learning experiences and outcomes.

Conclusion

The study's results emphasize a significant disparity among the AL, OAP, and teachers' self-reported PAP outcomes. Private TVET teachers in the ANRS fall short of meeting the seven standards for both test results and OAP in student assessment. These findings suggest limitations in teachers' abilities to effectively select, develop, implement, and validate appropriate classroom assessments. Notably, there was a notable misalignment in teachers' literacy, perception, and practice in CBA. Although teachers' PAP was considered moderate, the AL and OAP in the seven standards of assessment were found to be inadequate.

The study employed semi-structured interviews to assess teachers' perceptions and practices in educational assessment. Theme analysis revealed that only a small percentage of teachers demonstrated proficiency in specific assessment ideas, while the majority performed poorly on most assessment principles. Consequently, teachers appear to require professional assistance in educational assessment methods, as the majority expose their students to insufficient skill development. These findings highlight the need for targeted interventions and professional development initiatives to bridge the existing gaps in teachers' AL and OAP.

Recommendations

The following recommendations are made to enhance the general competency of teachers in student assessment. The ATVETB is encouraged to provide training on educational assessment for students and issue license certificates before assigning teachers and assessors to institutions and assessment centers. Emphasizing pre-service and in-service training, continuous professional development initiatives should be a key focus for private TVET colleges to ensure teachers are well-prepared for effective student educational assessment.

Moreover, to improve teachers' assessment competence and CBA practices in private TVET colleges, the strategy includes establishing mentorship programs, Adopting assessment methods used by Ethiopian Orthodox Church education teachers and fostering an ethical framework for assessments among TVET teachers could enhance their competence in CBE, offering diverse resources, creating collaborative environments, promoting reflection, fostering supportive ecosystems, integrating AL courses, utilizing feedback mechanisms, and encouraging professional development.

This comprehensive approach aims to empower teachers through guidance, resources, collaboration, and continuous improvement, thereby enhancing their OAP effectively.

Furthermore, to gain a comprehensive understanding of the nationwide landscape and complexity of the issue, additional studies should be conducted. These studies should involve a diverse

subgroup and a substantial sample size to provide a more in-depth exploration of the competency of teachers in the educational assessment of students at the national level.

Ethical Consideration

The study protocol, with approval number 06/IRB/23 from the Bahir Dar University Institutional Review Board, was implemented with the written and oral informed consent of the participants. A comprehensive consent form, outlining the research's objectives, the researcher's contact information, as well as the potential benefits and risks involved, was prepared and distributed to all participants. Rigorous measures were undertaken to ensure safety, such as encoding participants' names and crafting study reports to uphold privacy and confidentiality standards.

Human and Animal Rights

No animals/humans were used for studies that are base of this research.

Consent for Publication

The authors obtained written informed consent from the participants before the data was collected.

The authors declare no conflict of interest, financial or otherwise.

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