

***Examining the Impact of Teachers' Assessment Competency on Learners in Academia:
A Study of Selected HEIs of Uzbekistan***

Gunjan Jain, Westminster International University in Tashkent, Uzbekistan
Alim Asanov, Westminster International University in Tashkent, Uzbekistan

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Abstract

Assessment evaluates students' performance against established criteria, standards, or learning objectives to analyse learning outcomes through formative or summative techniques through ongoing feedback and opportunities for improvement so that curriculum, instruction, and educational policies are adjusted according to the student's needs. In this light, the need for transformation is anticipated as never before, and teachers' initiative in becoming more assessment competent is a sine qua non. As Ashraf & Zolfaghari (2018) view it, students' academic performance outcomes and assessment quality are representatives of teacher assessment literacy (p425). Therefore, teachers must equip themselves with knowledge, skills, values, and attitudes to contribute to the well-being and sustainable development of the entire educational milieu. This research aims to analyse *what teachers of selected HEIs in Uzbekistan think about the impact of their assessment literacy on encouraging learners' during seminars*. This topic has been excessively researched in various levels of education in many European countries and the United States (Carroll, 1995, p67; Sadler, 1998, p77; Keppell & Carless, 2006, p181; Weurlander et al., 2012, p759), but suffers a dearth of focused studies in Uzbekistan. A quantitative technique is applied to collect data from more than 100 teachers of HEIs from different reputed universities of Tashkent, Uzbekistan. The findings reveal the extent to which students' in-class involvement and greater responsibility for learning and self-assessment improvement depends on the teacher's level of assessment literacy. Besides, the obtained findings suggest measures to develop teachers' assessment competency and consistently adhere to several essential principles for encouraging learners in active learning.

Keywords: Active Learning, Assessment Competency, Formative and Summative Assessment, HEIs Teachers

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Introduction

Assessment has been acknowledged as a crucial component of the teaching and learning process across all levels of education. Teachers who possess proficiency in assessment play a vital role in the educational process by designing assessments that foster active learning among students. Despite the idealistic nature of this proposition, the reality is often less optimistic, as many encounter challenges in acquiring assessment competency. This issue was first raised by Knight (2002) over two decades ago, who contended that summative assessment was in a state of 'disarray' for the paucity of reliability. Subsequently, Knight & Yorke (2003) concluded that formative assessment failed to realize its potential, and Gibbs & Simpson (2004) observed a sharp decline in both summative and formative assessment. In this context, the development of teacher assessment literacy represents an ethical and moral obligation, as it provides every student with an opportunity to learn (Willis, Adie, & Klenowski, 2013).

The government of Uzbekistan has proposed a five-year Education Sector Plan (ESP) for the period 2019-2023, which aims to enhance teacher effectiveness and improve student performance through progress in assessment practices and teacher assessment literacy for both in-service and pre-service teachers (Sankar, 2021, p 109-110). There are 209 local and international universities operating in Uzbekistan, and the majority of them are located in the capital city Tashkent which focus primarily on the content knowledge of teachers rather than their competency in assessment. As such, the role of higher education institution (HEI) teachers in Tashkent in driving transformation at the state level is crucial. However, there is a dearth of research on teacher assessment competency and its relationship with students' active learning. Therefore, this study aims to contribute to the scientific pool of data by analyzing HEI teachers' perceptions of the impact of their assessment competencies on students. Specifically, the purpose of this research is to examine how Tashkent HEI teachers comprehend formative and summative assessments, identify the techniques and principles they employ to promote active learning in their teaching, investigate the methods they use to evaluate their own assessment competency and analyze the training and professional development opportunities related to assessment that they attend.

The attempt to investigate the problem statement, driven by the researchers' personal interest, aims to contribute to the existing literature on such broader areas as education research, assessment literacy, teacher professional development as well as learning and instruction, particularly within the higher education sector. The outcomes of this study may purvey valuable data for a number of stakeholders, namely the HEI teachers and students themselves, researchers, teacher training institutions, HEI administrators and the Ministry of Education. Besides, with the obtained results, it becomes more feasible in the observable future to further research the problem of HEI teachers' assessment literacy and students' active learning and integrate the best practices not only of universities in Tashkent but also in the regional ones.

In the following sections, there is a focused literature review, combined with a thematic analysis of articles addressing the research problem, followed by a detailed description of the applied research methodology, analysis of obtained data in the results section, discussion and conclusions.

Literature Review

Introduction

Assessment in higher education is the most debatable issue facing several challenges. While summative assessment is asserted to be in 'disarray' for the dearth of reliability (Knight, 2002, p276), formative assessment fails to fulfill entrusted potential (Knight & Yorke, 2003, p7) or even suffers a decline (Gibbs & Simpson, 2004, pp9-10). Students start to take charge of their learning when they can differentiate themselves from content and learning strategies that help in achieving their learning objectives.

Formative and Summative Assessment: Definitional Variations and Parameters

Although summative and formative assessments are regarded as processes, assessment cannot only be entirely formative with preceding judgments of a summative nature. Knowing about these processes and combining them effectively to encourage students' learning is known as "teacher assessment competency" (Taras, 2005, p467). Both "summative" and "formative assessment" concepts were introduced to measure the overall value of a programme (Bennett, 2011, p6). In this earlier context, while the summative assessment was used to indicate how one programme was similar or different to an alternative one, the formative assessment was aimed at finding ways to facilitate the improvement of a programme heavily relying on its results. For Bloom (1969, p48), the main purpose of the formative evaluation was feedback and appropriate correctives provided at each stage of the process in teacher-student interaction; as for summative assessment, it was undertaken to evaluate what the learner's achievement was at the end of a course (cited in Shuichi, 2016, p81).

Nevertheless, despite not distorting the initial purpose, the definitional rhetoric of more modern researchers has taken different views, shapes, and depths due to the focus shift from educational programmes to students. Sadler (1998) defined *formative assessment* as an assessment explicitly designed to produce feedback on students' performance to enhance and expedite learning (p77). The researcher Carless, (2007) warns about the power of summative assessment to drown formative approaches to assessment with the lack of productive synergies (p62).

One of the most recent definitions proposed by Cobeña et al. (2021) promulgates that formative assessment is the type of evaluation that is transformed into an achievement of both the teacher and the student due to the goal being made visible and understandable by the former so that the later could recognize the degree to which the educational process has been understood (p133). Summative assessment of students is more transparent when correlated with formative assessment (Fasih, Shamim, & Ali, 2019, p117); nevertheless, its primary purpose remains not ongoing learning but reporting on students' extent of learning at a particular time (Dolin et al., p63).

Impact of Teachers' Assessment Competency on Students' Active Learning

The development of teacher assessment literacy represents ethical and moral obligations because this gives every student a chance to learn (Willis, Adie, & Klenowski, 2013, p253). Through the mediation of an assessment-literate teacher implementing conscious intervention design (teamwork, feedback giving and receiving, and reflective self-evaluation), a harmonious combination of pedagogic approaches and continuous ipsative affordances,

undergraduate student performance can significantly develop (Hoo, Deneen, & Boud, 2021, p12). Following a 2-year case study on 175 undergraduate students by Viegas, Alves, & Lima (2015), it was revealed that readjustment from didactic design to a wide range of assessment tasks (i.e. "...weekly homework with peer revision in class during the problem discussion; competence and concept questions in the recitation and problem-based classes and, the development of a [mini] project work") accompanied by teacher feedback affected a change in most students (pp930-934).

Factors Underlying Students' Engagement in Active Learning

Assessment literacy of teachers is a foolproof way to increase students' academic progress and, in the meantime, their knowledge about assessment practices in general. Smith et al.'s study on 369 undergraduate first-year business students, revealed a 10% increase in the marks following the implementation of formative assessment as part of the 50-minute "intervention process" (i.e. develop students' ability to judge their own and others' work against pre-set criteria and standards), thus enhancing their learning outcomes (2013, pp23-24). This suggests that interventions intended to improve learning through assessments raise assessment literacy. Nicol & Macfarlane-Dick's (2006) observations show that in higher education, despite encouraging students to take greater responsibility for their assessment learning, teachers were reluctant to let students have responsibility for formative assessment processes, without which the ability to self-regulate learning seems unlikely.

Importance of Varying and Combining Formative and Summative Assessments to Promote Students' Active Learning

The teacher decides on assessment tasks; if done consciously and consecutively, the tasks are likely to improve and facilitate students' learning. Learning-oriented assessment yields effective results (i.e. supporting student learning in different ways) when combined assessment tasks (Keppell & Carless, 2006, p181; Offerdahla & Tomanek, 2011, p792; Weurlander et al., 2012, p759). Teachers can significantly contribute to students' learning by integrating continuously active learning activities, diversifying approaches to meet student needs, assessing students' progress and eventually making relevant adjustments (Lumpkin, Achen, & Dodd, 2015, p131; Adkins, 2018, p39). Threlfall (2014) suggests reflective discourse and journaling are genuine assessments for the effective development of active student learning, especially teaching a smaller number of students (pp323-329).

In conclusion, reviewing the existing literature helped in identifying significant themes and trends related to the relationship between teachers' assessment competency and its influence on students' active learning. It was ascertained that students undeniably depend on their teachers' literacy in the assessment domain and significantly benefit when effective combinations of versatile formative and summative assessments are implemented. However, this issue is predominantly studied in the context of European countries. There needs to be more data on this relationship about many HEIs operating in Tashkent, Uzbekistan. With this gap in the reviewed body of secondary data, there evolves the need to analyze perceptions of teachers employed by HEIs in Tashkent to reveal how and whether their assessment competency contributes to encouraging students'.

Methodology

The following section outlines the methodology applied in the current study to investigate what Tashkent HEI teachers think about the impact of their assessment competency on encouraging students' active learning. Outlined are the design of the research, its participants, employed instruments, methods of data collection and employed procedures in data analysis.

To collect data from HEI teachers about their assessment practices and perspectives, this study employed a cross-sectional survey design using an online questionnaire. The rationale behind choosing this design was that it allowed for a large sample size to be recruited simultaneously within a short span of time and was convenient for both the respondents and researchers and enabled the former to obtain high-quality data considering the degree of anonymity of participants.

The target population chosen for this study consisted of interdisciplinary in-service teachers employed by higher education establishments. To recruit them, non-probability convenience as well as snowball sampling techniques were used. Since any instructor of the Tashkent HEI population had an equal chance of participating in the survey, simple random sampling techniques were employed. The questionnaire link was distributed to teachers at various higher education institutions via webmail and social media platforms. A total of 100 teachers completed the online survey built on a cloud-based application called Survey Monkey. The sample included 67 females and 33 males whose age predominantly ranged within a 31-51+ age bracket. A sizable majority (68%) held an MA degree while 14% were PhD holders and Doctoral students. The respondents taught a variety of subjects across different program levels.

The questionnaire, categorized in conjunction with the research question and objectives, was made up of 20 questions, mainly consisting of Likert scale format questions, including closed-ended questions as well as open-ended, multiple choice, ranking and hypothetical ones. Before being sent to a larger sample, the questionnaire passed two stages of modification and approval. First, to identify and revise different issues (ambiguous or confusing questions), some technical flaws and respondent fatigue, facilitate clarity and ensure validity and reliability, it was piloted among 6 highly skilled teachers; secondly, the questionnaire was reviewed and approved by the WIUT Research Committee so that it could be disseminated among WIUT academic staff and across other universities in Tashkent. This process increased the credibility of the study, facilitated access to a large sampling frame, helped to avoid any potential legal issues and ensured that the studies were conducted without breaching ethical guidelines.

To summarize the data obtained from the questionnaire, descriptive statistics, including percentages and frequencies were calculated. To this end, various trends, patterns and associations were identified while analyzing the content. To examine common patterns and compare categories such methods as cross-tabulation and frequency analyses were found to be particularly effective.

Results

The survey included respondents from a total of 37 universities. Its findings indicate a gender imbalance, with females comprising two-thirds of the respondents and males representing only one-third. In terms of age distribution, the largest group falls within the middle age

category of 31-40, while the oldest age category (51+) is the least represented. In terms of educational qualifications, 68% of participants held a Master's degree, while the number of PhD/EdD holders was significantly smaller, with only 14 participants. DSc degree holders represented the lowest percentage at 3%, and 10% of participants were Doctoral students pursuing their Ph.D. Regarding teaching positions, the largest group (38%) taught in the first year of BA/BS/BL programs, followed by those teaching foundation courses (31%). Postgraduate teachers accounted for only 15% of respondents. Additionally, 14% of respondents fell into the "other" category, indicating that their specific teaching levels were not provided in the survey options (Table 1).

Variables	Category	Frequency Number	Per cent
Gender	Female	67	67
	Male	33	33
Age	20-30	19	19
	31-40	49	49
	41-50	26	26
	51 and above	6	6
Highest Educational Attainment	Master	68	68
	PhD/EdD	14	14
	Doctoral Student	10	10
	DSc	3	3
	Other	5	5
Levels taught	Pre-university	8	8
	Foundation	31	31
	1 year BA/BS/BL*	38	38
	2 year BA/BS/BL	30	30
	3 year BA/BS/BL	31	31
	Postgraduate	15	15
	Other	14	14

*(Bachelor of Arts/Science/Law)

Table 1: Demographics: gender, age, educational attainment and length of teaching

The survey encompassed a wide range of academic modules, with over 150 subjects mentioned. These modules were categorized into eight areas, including English Language Teaching, Economics/Finance/Business Management, Education, Computer Science, Mathematics, Linguistics, Social Sciences, and Law (Figure 1).

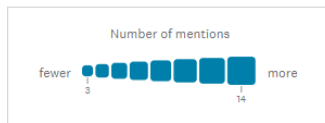


Figure 1: Academic modules/courses taught by the participants

The majority of respondents (66%) understood summative assessment as evaluating learner achievement at the end of a course, while only 20% viewed it as assessment-based data for academic judgments. In contrast, formative assessment was seen as providing feedback and correctives at each stage of the process (57%), enhancing learning through performance feedback (nearly half), focusing on learner needs (29%), and implementing tailored assessments (34%) (Table 2).

Variables	Category	Frequency Number	Per cent
Definitional relevance of “summative assessment” to the context of teaching	Assessment undertaken to evaluate learner’s achievement at the end of a course	66	66
	Assessment occurring through the accumulation of evidence over an extended time by testing students either within or at the final stages of assessment periods to provide an overview of previous learning	66	66
	Assessment applied to the use of assessment-based data for making judgments on academic issues that have already occurred	20	20
	Assessment instigated by accountability needs in response to constraints and pressures exhibited externally	6	6
	Other	4	4

Definitional relevance of “formative assessment” to the context of teaching	Feedback and appropriate correctives provided at each stage of the process in teacher-student interaction	57	57
	Assessment explicitly designed to produce feedback on students’ performance to enhance and expedite learning	48	48
	Assessment focused on the process to provide evidence for strengthening students’ learning	42	42
	Assessment implemented cyclically either between or within lessons, which is then tailored to the learners’ needs	34	34
	Type of evaluation that is transformed into an achievement of both the teacher and the student due to the goal being made visible and understandable by the teacher so that the student can recognize the degree to which the educational process has been understood	33	33
	Assessment focused on the learner’s needs	29	29

Table 2: Formative and summative assessments defined within the context of the participants’ teaching

The study also examined the correlation between summative and formative assessment transparency among HEI teachers. The majority (81%) agreed or strongly agreed that transparency increases when the two assessments are linked, with only a small percentage (10%) expressing disagreement (Figure 2).

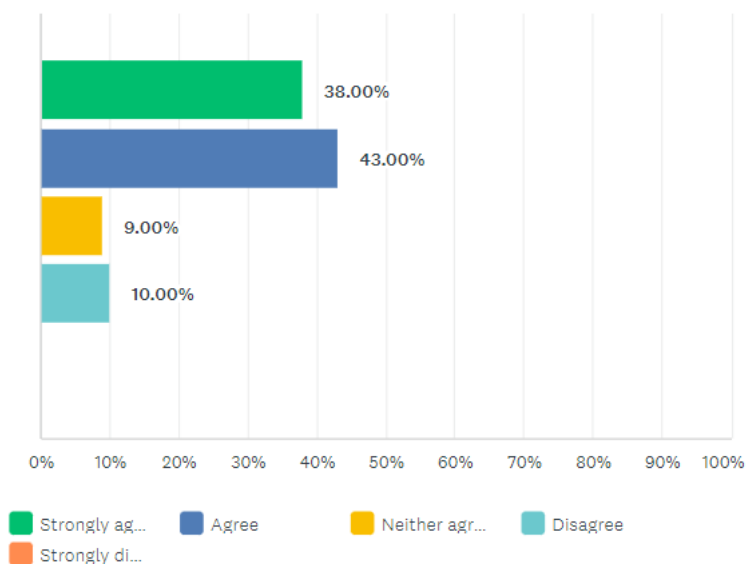


Figure 2: Respondents’ perception about the transparency of summative assessment when aligned with formative assessment

The study aimed to understand HEI teachers' perception of "assessment competency" in their teaching. While a small portion (7%) demonstrated limited awareness, 54 respondents linked it to objective and reliable student assessment, with one stating, "...when formative assessment leads to achieving summative assessment" (R28). Another 33 teachers associated it with designing effective assessments aligned with learning outcomes. Constructive

feedback as a guiding tool was emphasized by 13 respondents, with one stating, "...*accurately measure students' progress and achievements*" (R35). A more comprehensive understanding was expressed by R85, mentioning collecting evidence, adapting curriculum, and meeting student needs. Furthermore, 49 teachers believed assessment competency identifies areas for improvement through objective assessment. Reflecting on the relationship between assessment and active learning, some teachers emphasized the importance of feedback guiding both students and teachers. Additionally, designing effective assessment tasks and rubrics was highlighted by 14 respondents (Table 3).

Common patterns collected from respondents' response	Selected quotations from the participants' responses
1). Gaps in knowledge (7 Responses)	<p><i>"I am not familiar with this concept."</i> (R4)</p> <p><i>"To be honest, I don't know. Anyway, I believe that any person with strong knowledge, big passion and strong communication skills can be a great teacher."</i> (R52)</p> <p><i>"To give a mark."</i> (R86)</p>
2). Knowledge and skills to assess students objectively and reliably (54 Responses)	<p><i>"It is when formative assessment leads to achieving summative assessment."</i> (R28)</p> <p><i>"Ability of teacher to encourage students to learn better by providing timely feedback based on their performance"</i> (R48)</p> <p><i>"To measure the knowledge and skills that were taught by applying the appropriate tool."</i> (R67)</p> <p><i>"Being able to reach objectives based on assessment."</i> (R97)</p>
3). Ability to design and implement effective assessments correlated with LOs (33 Responses)	<p><i>"Teacher's ability to create relevant for the student's academic growth assignments and activities all of which are linked to the learning outcomes."</i> (R1)</p> <p><i>"instructional and assessment approach according to students' needs, comprehension."</i>(R12)</p> <p><i>"Set of assessment-related skills and experience."</i> (R87)</p>
4). Ability to provide constructive feedback to guide students (13 Responses)	<p><i>"Teacher assessment competency means, for me, that teachers are good at figuring out how well their students are learning."</i> (R21)</p> <p><i>"Knowing what to assess and how to assess using summative or formative assessment) and modifying curriculum to meet student's needs or areas where their knowledge is lacking."</i> (R85)</p>
5). Objective assessment of students' knowledge to identify areas for improvement (49 Responses)	<p><i>"The capability of a teacher providing valid and reliable assessment"</i> (R13)</p> <p><i>"The ability to be objective"</i> (R27)</p> <p><i>"Knowledge about the subject and ability to properly assess the students."</i> (R32)</p> <p><i>"Knowledge of where to lead and how to teach."</i> (R73)</p> <p><i>"... the ability of a teacher to assess the student appropriately."</i> (R84)</p> <p><i>"... ability to certify that students possess certain skills or knowledge."</i> (R99)</p>
6). Providing constructive feedback to guide students and to inform teaching (14 Responses)	<p><i>"The main competency of a teacher is to learn (study) all the time."</i> (R17)</p> <p><i>"It is the ability of a teacher that can evaluate learners' skills by giving constructive feedback and guiding for higher achievements in the learning process."</i> (R29)</p> <p><i>"For me, it is the teacher's ability to evaluate students' achievements, academic progress through various learning activities."</i> (R50)</p>

7). Designing effective assessment tasks and rubrics that promote learning (14 Responses)

“I think it is how competent a teacher is about assessment i.e. whether they can design and use assessments appropriately.” (R2)
“... can use appropriate assessment tasks following principles of assessment.” (R41)
“It is understanding and appropriately comprehending graduate attributes, learning outcomes and assessment criteria.” (R71)

Table 3: Teachers’ understanding of assessment competency

Determining the impact of teachers' assessment competency on students' active learning, the majority (52%) strongly believe it encourages active participation, while 40% consider it moderately influential. Only 3% see little to no correlation (Figure 3).

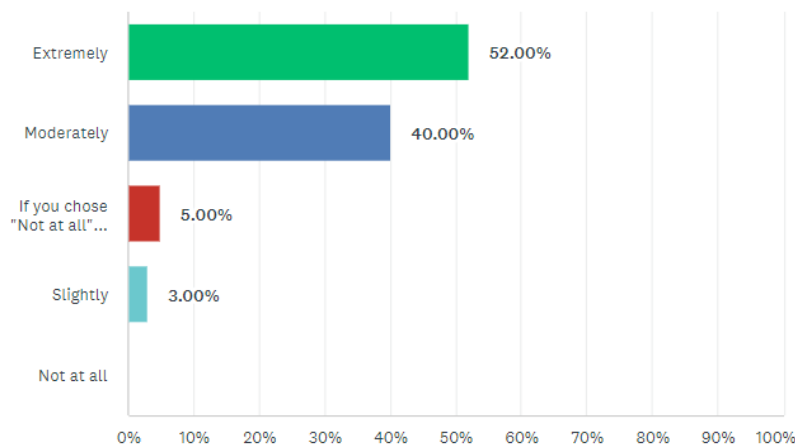


Figure 3: The extent to which teachers' assessment competency encourages students

Besides, the study revealed a positive correlation between effective teacher assessment practices and students' engagement in learning. The majority (78%) associated teacher assessment competency with increased student responsibility for learning. Half of the participants (50%) believed it improved students' self-assessment skills. Additionally, 36% reported enhanced peer assessment, while 25% noted increased marks/grades. Other benefits mentioned by 11% of the respondents were deeper subject engagement, greater satisfaction with achievements, and higher study incentives (Table 4).

Variables	Frequency Number	Per cent
Greater responsibility for learning	78	78
Improvement in self-assessment	50	50
Improvement in peer-assessment	36	36
Increase in the marks	25	25
Other	11	11

Table 4: Effect of teacher assessment competency on students’ active learning

In terms of assessment techniques employed to promote active learning, group projects and peer reviews were the most preferred, utilized by approximately half of the teachers (49.5% and 17.3% respectively). Self-reflection and case studies were common among one-third of respondents (35.5% and 33.3% respectively). Presentations, quizzes, and portfolios were less

frequently used (23.7%, 16.4%, and 14% respectively). Additionally, a variety of other techniques, mentioned once each, were seen as important, including minute papers, surveys, checklists, peer teaching, debates, inquiry-based learning, verbal reporting, self-directed learning, interviews, exit tickets, and problem-based learning (Table 5).

Variables	Frequency Number	Per cent
Group projects	46	49.5
Peer review	44	47.3
Self-reflection	33	35.5
Case studies	31	33.3
Presentations	22	23.7
Quizzes	15	16.1
Portfolios	13	14
Other techniques related to active learning	13	14

Table 5: Assessment techniques integrated into teaching for active learning

According to the survey, the majority of HEI teachers (86%) consider providing constructive feedback as the most crucial principle for promoting active learning. Welcoming feedback from students and facilitating self-assessment through reflection were also highly valued, accounting for 68% and 65% respectively. Giving opportunities to bridge performance gaps (56%) and encouraging learning-related dialogue (55%) were seen as important too. Encouraging self-esteem and motivational beliefs, as well as delivering high-quality information about students' learning, received relatively lower percentages (31%) compared to other principles (Table 6).

Variables	Frequency Number	Per cent
Providing constructive feedback	86	86
Facilitating the development of self-assessment in learning through reflection	68	68
Delivering high-quality information about students' learning	65	65
Encouraging learning-related dialogue between teachers and between students	56	56
Encouraging self-esteem and uplifting motivational beliefs	55	55
Giving opportunities to bridge the performance gap between present and desired performance	49	49
Welcoming feedback from students to shape teaching	31	31
Other	2	2

Table 6: Principles to which teachers should adhere to encourage students' active learning

To assess their own competency in assessment, respondents favoured attending professional events (77%) and engaging in self-reflection (76%). Feedback from others was also valued, with teachers relying more on students' feedback (70%) than on that of their colleagues (64%). Among those, the least favoured option was self-assessment opted for by slightly less than six-tenths (57%). Additionally, observation, reading research articles, and expecting compensation for skill development were mentioned as ways to gauge assessment competency (Table 7).

Variables	Frequency Number	Per cent
Participating in professional events (workshops, training sessions, conferences, etc.)	77	77
Self-reflection (reflecting on one's own behaviour, attitudes, or beliefs in a particular situation)	76	76
Seeking feedback from students	70	70
Seeking feedback from colleagues	64	64
Self-assessment (reflecting on one's own performance or abilities in a particular area)	57	57
Other	7	7

Table 7: Methods used by Tashkent HEI teachers to assess their own assessment competency

Regarding training and formal courses related to assessment, 65% of respondents had received some training. Among them, 25.8% felt a very high impact (71-100) on their assessment practices, while equal figures were reported for moderate (51-70) and some (31-50) influence. A small percentage (11.4%) rated their training as having low influence. Finally, the most popular courses were MALT and PGcert offered by WIUT (27.7%), followed by Webster University (4.5%) and British Council (9.1%). Surprisingly, only 3% obtained assessment knowledge during pre-service studies or abroad (Table 8).

Variables	Category	Frequency Number	Per cent
Experience in undertaking any formal training/course related to assessment competency	Yes	65	65
	No	35	35
The effect training had on assessment competency (70 responses)	0-30 responses	8	11.4
	31-50	22	31.4
	51-70	22	31.4
	71-100	18	25.8
Type of training and where accomplished	MALT/PGcert at WIUT: Assessment Matters Module	18	27.7
	British Council Training	6	9.1
	Online courses (Coursera, World Bank, etc.)	5	7.6

Webster University	3	4.5
Pre-service part of the course	2	3
ERASMUS + CACTLE project	2	3

Table 8: Training in Assessment: Experience, Impact and Types

Discussion and Implications

The quantitative analysis provided valuable insights into the impact of teacher's assessment competency in encouraging active learning among learners of HEIs in Tashkent. Despite diverse age groups and educational backgrounds, the sample lacked gender diversity, likely due to teaching being more popular among females in Uzbekistan. Most respondents were middle-aged with Master's degrees, teaching various modules.

The participants demonstrated a proper understanding of formative and summative assessments, recognizing their correlation and the transparency they bring to students' achievements (Fasih, Shamim, & Ali, 2019, p117). This balanced perspective could enhance learner engagement. HEI teachers view summative assessment as a means to evaluate student learning and achievement at the end of a course (Bloom, 1969, as cited in Shuichi, 2016, p81). However, it is seen as assessment-based data by a minority, suggesting a need for more training to strengthen assessment competency. Formative assessment, on the other hand, is viewed as a private concept focused on providing tailored feedback to enhance student learning (William & Thompson, 2008, p71; Lumpkin, Achen, & Dodd, 2015, p131; Adkins, 2018, p39).

The respondents' own definitions of teacher assessment competency proved to be diverse and ranged from possession of knowledge and skills to having the ability to design and implement assessments to provide constructive feedback and identify areas for improvement. The fact that some teachers admit their lack of understanding of the concept reinforces the need to encourage teachers to seek training opportunities. As stressed in various findings (Lumpkin, Achen and Dodd, 2015, p131; Adkins, 2018, p39), with teachers' reluctance to learn about it or unintentional ignorance, no significant contribution to students' learning via diverse means is likely to happen.

According to participants, their assessment competency has a moderate to strong impact on encouraging active student learning, leading to increased student responsibility, self-assessment, and peer assessment. These align with principles supporting self-regulated learning (Nicol & Macfarlane-Dick, 2006; Viegas, Alves, & Lima, 2015, pp930-934). Teachers' expertise in assessment alone may not effectively promote student learning involvement. While some teachers attributed assessment competency to increased marks, most value the benefits of formative assessment over summative (Smith et al., 2013, pp23-24). Other suggestions given by the participants, promoting deeper engagement with a subject and higher incentives to study. This could be achieved by incorporating diverse assessment techniques and strategies.

To promote active learning during seminars, respondents utilize techniques such as group projects, peer reviews, self-reflection, and case studies, reflecting their appreciation for collaborative and formative assessment (Offerdahla & Tomanek, 2011, p792; Weurlander et

al., 2012, p759). Resource constraints and a preference for standardized summative assessments may explain the relatively lower use of techniques like presentations, quizzes, and portfolios. Similarly, techniques such as minute papers, surveys, checklists, peer teaching, debates, and problem-based learning were rarely incorporated, possibly due to limited training and resistance to change. These findings align with existing literature highlighting the benefits of combining various assessment tasks to support student learning (Offerdahla & Tomanek, 2011, p792; Weurlander et al., 2012, p759).

The respondents demonstrated adherence to several essential principles for promoting active learning. These principles include providing constructive feedback, eliciting student feedback, and developing self-assessment (Nicol & Macfarlane-Dick, 2006). The emphasis on these principles suggests that teachers recognize the value of constructive feedback in deepening student understanding and establishing a reciprocal learning environment. Developing self-assessment not only personalizes students' learning but also fosters a growth mindset, increased awareness of teaching strategies, and accountability for learning outcomes. However, the relatively low emphasis on encouraging self-esteem, uplifting motivational beliefs, and delivering high-quality information about student learning may indicate a need for additional professional development courses in these areas. Further research is necessary to explore the underlying reasons for these lower figures. With targeted professional development, teachers could significantly benefit and enhance their practices in these aspects.

Teachers in the survey evaluated their assessment competency using various methods, including attending professional events, engaging in self-reflection, and seeking feedback from students and colleagues. The preference for attending events and self-reflection highlights the significance of ongoing professional development and introspection in developing assessment practices. Surprisingly, respondents relied more on student feedback than on feedback from colleagues, possibly due to their direct interaction with students and a student-centred approach that values different perspectives and student involvement (Trumbull & Lash, 2013, p2). However, incorporating student feedback into assessments requires teacher training. The low selection of self-assessment as a method may be attributed to teachers' lack of knowledge and confidence in assessing their own competence. Further research can explore the reasons behind these findings, which may include factors such as teacher compensation and motivation to improve assessment skills (observation, reading research articles, etc.).

Finally, around two-thirds of the respondents in the survey had received assessment-related training, with just over a quarter of them reporting a moderate to very high impact on their teaching (Offerdahla & Tomanek, 2011, p792; Weurlander et al., 2012, p759; Lumpkin, Achen, & Dodd, 2015, p131; Adkins, 2018, p39). This suggests that teachers have ample opportunities for professional development and motivation to engage in training and courses, although there is room for improvement. The popularity of courses such as MALT and PGcert offered by WIUT indicates their potential as models for other programs to replicate best practices. However, the limited acquisition of assessment-related knowledge during pre-service studies highlights the need for HEIs to evaluate teachers' assessment literacy during recruitment. To address this, the Ministry of Higher Education should establish mandatory core modules at the state level to raise teachers' awareness of modern assessment practices.

Limitations

In this study, several limitations were encountered that may affect the generalizability and depth of the findings. Firstly, the dominance of female MA degree holders in the sample introduced potential biases, limiting the representation of diverse perspectives related to gender. Additionally, the low participation of male subjects further exacerbated the lack of gender diversity within the study. Another limitation relates to the regional context of Uzbekistan, as the extensive nature of the modules taught by the respondents may restrict the applicability of the findings to other regions or educational contexts. Moreover, the reliance on self-reported data poses a potential source of bias and inaccuracies in the results, as participants' responses may not fully reflect their actual assessment practices. Furthermore, the study did not delve deeply into the reasons behind the low indexes observed for several principles of promoting students' active learning, leaving room for further investigation. The research also missed the opportunity to gain an insightful understanding of the rationale behind the respondents' selection of assessment techniques and strategies. Another limitation stems from the survey format employed in data collection, which may have constrained the depth and richness of information that could have emerged from alternative methods such as interviews, focus groups, or observations. Lastly, the study did not specifically examine the effectiveness of the training courses and professional development activities attended by the respondents, which could have provided valuable insights into their impact on assessment practices. These limitations highlight the need for future research to address these gaps and enhance the comprehensiveness and validity of findings in this area.

Conclusion and Recommendations

In conclusion, the current study analyzed teachers' understanding of assessment competency and its impact on students' active learning in HEIs in reference to Uzbekistan. It has been revealed that the respondents, on the whole, demonstrated a pertinent understanding of both forms of assessment and asserted that there is an obvious correlation between them leading to a higher degree of transparency in students' achievements. While summative assessment is majorly seen as a way to evaluate student learning and achievement at the end of a course, the formative assessment is majorly considered as a means of providing feedback to enhance student learning, tailored to their needs and the learning process. Teacher assessment competency lacks a comprehensive picture and is viewed as a diverse quality ranging from possession of knowledge and skills to having the ability to design and implement assessments to provide constructive feedback and identify areas for improvement. The major finding of this study, being interpreted as a means conducive to increased student responsibility, better self-assessment and peer review, suggests that Tashkent HEI teachers' assessment competency had a moderate to strong impact on encouraging their students' active learning. The research also revealed that the most widely integrated techniques to promote active learning are group projects, peer reviews, self-reflection and case studies, while the diversity of principles spread over providing feedback, eliciting student feedback, developing self-assessment, improving performance and facilitating dialogue. HEI teachers predominantly rely on competency by attending events, self-reflection, and student feedback to gauge their own competency in assessment. Finally, while most teachers have obtained related to assessment training, a sizable majority recognize little impact on their practices and expect additional opportunities to augment their knowledge and skills, and thus fill in those gaps.

The results derived in this research are open to criticism and require further refinement. However, relying on the current understanding of the investigated domain, revealed results

and reviewed literature, several actionable recommendations along with responsible parties for their implementation are outlined below:

1. HEI Research departments should replicate the research by employing a larger, more diverse sample to enhance generalizability and triangulate data to gain deeper insights by conducting interviews or observations in addition to surveys.
2. The Ministry of Higher Education and HEI administrations should provide mandatory formal training on assessment for all HEI teachers being recruited.
3. Teacher training centres and HEI administrative staff should offer ongoing professional development opportunities on formative and summative assessment.
4. HEI Research departments should examine the impact of different training programs on developing assessment literacy and investigate the impact of teacher assessment competence on student learning outcomes (e.g. engagement, motivation or achievement).
5. Department heads should promote collaborative learning and peer observation among teachers.
6. The Ministry of Higher Education and HEIs should integrate compulsory core modules on assessment in all pre-service teacher education programs.

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Contact email: gjain@wiut.uz