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Research Paper

A Mixed Method Research: The Effect of a Teacher Education Course on Pre-service EFL Teachers' Self-efficacy in Formative Assessment

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Abstract

This study aimed to examine the effects of a teacher education course on EFL teachers' self-efficacy in formative assessment. The researchers employed a mixed-method design that combined quantitative and qualitative approaches to investigate the effects of the course. Thirty EFL teachers participated in the study and completed pre- and post-intervention questionnaires to assess their formative assessment self-efficacy beliefs. In addition, semi-structured interviews were conducted to gather qualitative data on teachers' beliefs about formative assessment. The quantitative data were analyzed using paired-sample t-tests, and thematic analysis was conducted for the qualitative data. The results indicated a significant increase in teachers' formative assessment self-efficacy beliefs. The findings suggest that providing teacher education courses focused on formative assessment can effectively enhance EFL teachers' self-efficacy and utilization of such assessment methods in online classroom. Recommendations for the implementation of similar courses and potential areas for future research are also discussed.

Keywords: *Formative Assessment, Teacher Education Course, EFL Teachers, Self-efficacy, Formative Assessment Practice*

تحقیق ترکیبی: تأثیر دوره آموزش معلمان بر خودکارآمدی معلمان زبان انگلیسی قبل از خدمت در ارزشیابی تکوینی

این مطالعه با هدف بررسی تأثیر دوره تربیت معلم بر خودکارآمدی معلمان زبان انگلیسی در ارزشیابی تکوینی انجام شد. محققان از یک طرح ترکیبی استفاده کردند که رویکردهای کمی و کیفی را برای بررسی اثرات دوره ترکیب می کرد. ۳۰ معلم زبان انگلیسی در مطالعه شرکت کردند و پرسشنامه‌های قبل و بعد از مداخله را تکمیل کردند تا باورهای خودکارآمدی ارزشیابی تکوینی خود را ارزیابی کنند. علاوه بر این، مصاحبه‌های نیمه ساختاریافته برای جمع آوری داده‌های کیفی در مورد باورهای معلمان در مورد ارزشیابی تکوینی انجام شد. داده‌های کمی با استفاده از آزمون‌های t زوجی و تحلیل موضوعی برای داده‌های کیفی انجام شد. نتایج حاکی از افزایش معنادار باورهای خودکارآمدی ارزشیابی تکوینی معلمان بود. یافته‌ها نشان می‌دهد که ارائه دوره‌های آموزش معلمان متمرکز بر ارزشیابی تکوینی می‌تواند به طور موثری خودکارآمدی معلمان زبان انگلیسی و استفاده از چنین روش‌های ارزشیابی را در کلاس آنلاین افزایش دهد. توصیه‌هایی برای اجرای دوره‌های مشابه و زمینه‌های بالقوه برای تحقیقات آینده نیز مورد بحث قرار گرفته است.

کلمات کلیدی: ارزشیابی تکوینی، دوره آموزشی معلمان، معلمان زبان انگلیسی، خودکارآمدی، تمرین ارزشیابی تکوینی

Introduction

Formative assessment, as defined by the Assessment Reform Group (2002, pp. 1-2), “involves seeking and interpreting evidence to inform teachers and learners about current progress, set learning goals, and determine the most effective path forward.” It is a collaborative process that involves teachers and students working together to take shared responsibility for learning. Formative assessment, also known as “assessment for learning,” provides valuable feedback to enhance student learning and differs from the summative assessment, which focuses on evaluating learning outcomes (Heritage, 2010, p. 7). Another term commonly used for formative assessment is “assessment as learning” (Earl, 2003), underscoring the active role of students in the assessment process.

Formative assessment has gained prominence in educational settings as a departure from solely relying on summative assessment and as an inclination towards holistic and comprehensive evaluation of students. Consequently, there is an expectation for teachers to develop and implement various formative assessment practices that inform teaching and learning. However, the relationship between formative assessment and teachers’ self-efficacy beliefs remains underexplored in the field of education, particularly in language education, beyond examining teachers’ teaching efficacy (Aydin et al., 2012; Palmer et al., 2015; Utley et al., 2005) or students’ efficacy in academic subjects (Brown et al., 2016; Chiou & Liang, 2012).

Moreover, the COVID-19 pandemic necessitated a significant transition from traditional face-to-face teaching to online instruction in Iran’s educational system. This shift in educational policies amplified the assessment burden on Iranian EFL teachers, demanding an increased implementation of formative assessment practices. However, many teachers faced challenges such as insufficient assessment literacy (AL), limited resources, and a lack of confidence in conducting high-quality classroom assessments. Building teachers’ confidence and competence in implementing formative assessment practices is crucial for their professional development, as well-executed formative language assessment practices not only inform teaching but also foster student learning.

Despite efforts to investigate the impact of teacher education courses on language AL, limited attention has been paid to the effects of such courses on EFL teachers’ self-efficacy beliefs related to formative assessment practices and their actual implementation of formative language assessment, particularly in an online context. Efforts to enhance teachers’ AL have traditionally adopted a positivistic approach, emphasizing textbook-based courses (McGee & Colby, 2014), methods courses (Siegel & Wissehr, 2011), mentored learning environments (Graham, 2005), and classroom assessment programs (Mertler, 2009). However, the role of SCT in developing language AL, especially formative assessment, remains underexplored. SCT posits that development occurs through mediated interactions and is characterized by a gradual transition of control from external sources to the individual (Lantolf, 2006). This perspective offers a rich intellectual framework, which is conducive to enhancing language teacher AL (Scarino, 2013). Therefore, this study aimed to examine the impact of a teacher education course (TEC) grounded in sociocultural theories on EFL teachers’ self-efficacy in formative assessment.

Theoretical background

Sociocultural Approach to Teacher Education

The growing interest in the contextual nature of teacher learning, socially-constructed teacher knowledge, and sociocultural theories of learning has led to the emergence of Vygotsky’s sociocultural theory of mind (SCT) as a new paradigm in second language teacher education. According to Vygotsky, learning is shaped by sociocultural interactions and the learning environment, emphasizing the role of interaction in the transition from external activity to

internal control by learners. In addition, the concept of the zone of proximal development (ZPD) highlights the two stages of mental function development, emphasizing the importance of teaching that aligns with learners' specific ZPD.

Moreover, contemporary teacher professional development programs are increasingly embracing collaborative and inquiry-based approaches, contrasting with traditional top-down models that perceive teachers as passive recipients of limited knowledge and skills. These collaborative structures promote equitable social roles for teachers, mirroring the dynamics of classrooms where teachers and students interact. By adopting a Social Constructivist Theory perspective in L2 teacher education, teachers are positioned as active participants engaged in collaborative discussions to express their understanding of concepts and actively seek opportunities for reconceptualization and recontextualization. This shift challenges conventional approaches that treat teachers as passive recipients and has the potential to transform various aspects of teacher learning, language, language teaching, broader social and cultural structures, and the nature of professional development.

Before the 1990s, second language (L2) teacher education primarily focused on practical skill development through short-term teacher training courses (TTCs) (Tsui, 2011). The publication of Richards and Nunan's (1990) work on second language teacher education marked the emergence of this field as a distinct area of inquiry in both second and foreign language teaching. This new field aimed to equip L2 teachers with the skills and competencies, which were necessary for effective teaching (Richards, 1990). Freeman and Johnson (1998) later argued for a reconceptualization of TESOL teacher education and emphasized the importance of teaching activities, teachers, context, and pedagogy. They highlighted the situated nature of teacher learning and the need to focus on the activity of teaching itself (Freeman & Johnson, 1998). This emphasis on sociocultural theories of learning (e.g., Freeman, 2016; Lantolf & Johnson, 2007) has introduced Vygotsky's (1978, 1986) sociocultural theory of mind as a new paradigm in second language teacher education (SLTE).

The current study challenges the traditional, trainer-led TTCs, which prioritize the acquisition of discrete knowledge and skills, by designing a teacher education course (TEC) that fosters collaborative discussions among teachers. This approach encourages teachers to explore and reconstruct their understanding of educational concepts (Johnson, 2009).

Formative Assessment

Formative assessment is designed to guide and improve students' learning processes and outcomes (Van der Kleij, Vermeulen, Schildkamp, & Eggen, 2015; Bennett, 2011; Black & Wiliam, 1998). Recognized for its potential to enhance student learning, formative assessment has become a significant educational policy (Van der Kleij, Cumming, & Looney, 2018). Despite varying definitions (Van der Kleij et al., 2015; Bennett, 2011; Torrance, 2012; Wiliam, 2011), it is widely accepted as a useful classroom practice (Torrance, 2012).

Different theoretical perspectives have led to diverse conceptualizations of formative assessment, but its core characteristic remains the use of evidence to guide student learning. Feedback plays an important role in this process (Bennett, 2011; Black & Wiliam, 1998; Sadler, 1989; Stobart, 2008). Hattie and Timperley (2007) defined feedback as information about performance or understanding that is provided by various agents. Evans (2009) expanded this definition to include feedback from diverse sources within and beyond the immediate learning context. Teachers can adapt their instruction based on assessment-derived feedback, while students can use it to direct their learning (Bennett, 2011; Black & Wiliam, 1998; Sadler, 1989).

Assessment for Learning (AFL) focuses on the quality of the learning process rather than its outcomes (Stobart, 2008). It involves daily practices by students, teachers, and peers that enhance ongoing learning through dialogue, demonstration, and observation (Klenowski, 2009).

Information for AFL is often collected informally from various assessment sources (Gipps, 1994) and used as continuous feedback to guide learning. Effective AFL depends on the teacher's ability to gather evidence of student learning, interpret it, and translate it into instructional decisions and feedback (Bennett, 2011). Properly implemented, AFL can significantly improve student learning and achievement (Andersson & Palm, 2017; Fletcher & Shaw, 2012; Pinger, Rakoczy, Besser, & Klieme, 2018; Yin, Tomita, & Shavelson, 2013). Central to AFL is the continuous interaction between teachers and learners to meet learners' needs. AFL involves frequent dialogues and feedback loops, which integrates assessment into the learning process (Stobart, 2008). Students engage in self- and peer-assessment and enhance their understanding of learning goals (Elwood & Klenowski, 2002).

Despite its potential, formative assessment has shown mixed effects in practice (Baird et al., 2014; Furtak et al., 2016). One reason for this may be teachers' challenges in using formative assessment effectively (Bennett, 2011). Research suggests that many formative assessment implementations fail to reach the standard that is expected because they apply principles mechanistically without fully integrating them into classroom practice (Marshall & Drummond, 2006; Swaffield, 2011). Reviews of formative assessment highlight the critical role of teachers in its successful implementation (Black & Wiliam, 1998; Torrance, 2012). However, guidance for teachers is often limited or inappropriate (Van der Kleij et al., 2018), which results in limited use of formative assessment (Torrance, 2012). Effective formative assessment requires integrating it into instruction and redefining teacher-student power dynamics, making both jointly responsible for the quality of teaching and learning (Black & Wiliam, 1998). It remains unclear what is necessary for teachers to use formative assessment effectively.

Formative assessment self-efficacy

Undoubtedly, the successful implementation of formative assessment in the classroom depends on teachers' ability to implement it well. Skill acquisition is one way to increase self-confidence in formative assessment, as long as the individual has positive beliefs about applying the skills to attain the required outcomes, but skills alone might not be sufficient in bringing about change and adoption of new practices. In particular, self-efficacy beliefs play a critical role in helping an individual to attain the desired outcomes.

Self-efficacy refers to the beliefs one possesses to be able to accomplish specific tasks and is often considered as a predictor of one's behavior (e.g., Bandura 1977, 1997). Self-efficacy can be an important factor in consistent and effective implementation of evidence-based educational practices because when people are confident they can be successful, they take on challenges, expend effort, are persistent, use effective learning and regulatory strategies, seek help when it is appropriate and available, and experience low levels of stress and anxiety (Pajares, 1996). In the context of teaching, self-efficacy involves teachers' confidence in their abilities to enact effective instructional practices that result in students' learning and motivation (Tschannen-Moran and Hoy, 2001). In other words, self-efficacy beliefs are important because people tend to engage in tasks that they feel competent in and avoid those that they lack confidence in doing.

While research has demonstrated that well-executed formative language assessment practices are powerful classroom-embedded processes not only to inform teaching but also foster learning, there is still a dearth of research into the role of EFL teachers' formative assessment self-efficacy in their formative classroom assessment practices. More specifically, despite efforts to sequence professional development in language AL, the effect of a teacher education course on EFL teachers' formative assessment self-efficacy beliefs and their practices of formative language assessment remained underexplored. In this regard, this study aims to examine the effect of a socioculturally-informed teacher education course (TEC) on EFL teachers' self-efficacy for

formative assessment practices. Based on the objectives, the following questions were formulated:

RQ1: Is a teacher education course informed by sociocultural theories effective in developing Iranian EFL teachers' formative assessment self-efficacy?

RQ2: How does the teacher education course lead to changes in Iranian EFL teachers' formative assessment self-efficacy?

Methodology

The following section will explain the methodology employed in this study, emphasizing the research design, participant selection, instrumentation, data collection procedures, and data analysis techniques employed throughout the research process.

Design of the Study

To achieve the purposes of this study, a mixed-method design combining quantitative and qualitative approaches, known as a convergent mixed-method design, was employed. Mixed methods research is a philosophical framework that integrates qualitative and quantitative research methods to enhance the depth and breadth of understanding. (Creswell & Plano Clark, 2007; Office of Behavioral and Social Sciences Research, 2001)

Participants

A total of 30 English as a Foreign Language (EFL) teachers from two nationwide language institutes in Tehran, Iran, were selected to participate in this study. Purposive sampling was employed to recruit participants who were undergoing a teacher education course informed by sociocultural tenets on EFL teachers' self-efficacy for formative assessment. The participants, consisting of 15 males and 15 females, were Iranian EFL teachers enrolled in the teacher education course with the aim of teaching adult EFL learners. They had received instruction in language assessment and, more specifically, formative assessment strategies based on sociocultural theories. All participants were EFL teachers with a major in English Language Teaching (ELT). Table 1 displays the demographic information of the participants.

Instrumentation

Two instruments were utilized in this study: the Formative Assessment Self-efficacy Beliefs questionnaire (FASBQ) and the Formative Assessment Self-efficacy Beliefs Interview (FASBI).

Formative Assessment Self-efficacy Beliefs Questionnaire (FASBQ)

An adapted version of the FASBQ developed by Leng (2020) was employed to collect data on EFL teachers' formative assessment self-efficacy beliefs. The FASBQ consists of 22 items using a Likert-type scale ranging from "not confident at all" to "highly confident can do." These items assess EFL teachers' self-efficacy in implementing formative assessment in the classroom. Example statements include "I can give my students feedback to improve their performance" and "I can encourage my students to learn from one another." The scale demonstrated high reliability ($\alpha = .89$) and validity. The completion time for the questionnaire was approximately 20 minutes.

Formative Assessment Self-efficacy Beliefs Interview (FASBI)

The FASBI was conducted through semi-structured interviews to assess teachers' formative assessment self-efficacy before and after the teacher education course. The interview questions were derived from the themes and constructs identified in the FASBQ. Two experts in the field examined the content relevance and coverage of the questions to ensure content validity. The qualitative data obtained from the interviews were used to explore participants' beliefs about and

awareness of formative assessment self-efficacy. Two semi-structured interviews were conducted: one before and one after the teacher education course.

Data Collection Procedures

The data collection for this study took place over a two-month period, from August 2023 to September 2023. In August 1, 2023, the initial sample population of Iranian EFL teachers engaged in online teaching and assessment was identified and recruited using purposive sampling. Sixty Iranian EFL university teachers were selected. In August 2-5, 2023, The Formative Assessment Self-efficacy Beliefs questionnaire (FASBQ) was administered to the participants. Participants completed the questionnaire to gather quantitative data on their formative assessment self-efficacy beliefs. In August 6-7, 2023, semi-structured interviews, the Formative Assessment Self-efficacy Beliefs Interview (FASBI), were conducted with participants individually. The interviews aimed to gather qualitative data on teachers' formative assessment self-efficacy before the teacher education course. Interview questions were derived from the themes and constructs identified in the FASBQ.

In August 8-31, 2023, the teachers participated in the socioculturally-informed teacher education course, which focused on enhancing their formative assessment self-efficacy in implementing formative assessment techniques. The course involved classroom-based tasks, scenarios, and collaborative interactions among participants to facilitate the reconceptualization and restructuring of their knowledge and practices related to formative assessment. In September 1-3, 2023, after completing the teacher education course, the questionnaires (FASBQ) were administered once again to the participants. The aim was to assess any changes in participants' formative assessment self-efficacy beliefs that might have occurred because of the course. In September 4-5, 2023, follow-up interviews using the Formative Assessment Self-efficacy Beliefs Interview (FASBI) was conducted with participants individually. These interviews aimed to gather qualitative data on teachers' formative assessment self-efficacy, specifically focusing on any changes that may have emerged after the teacher education course. To address the ethical considerations, prior to their participation, all EFL teachers were fully informed about the study's purpose, procedures, potential risks, and benefits. They were given the opportunity to ask questions and provide their voluntary consent to participate. Participants were assured of their right to withdraw from the study at any time without penalty. To maintain confidentiality, all personal and identifiable information of the participants, including names and contact details, were kept strictly confidential.

Data Analysis

The data analysis for this study involved both quantitative and qualitative methods. As regards the quantitative analysis, Paired-sample t-tests were used to analyze the quantitative data obtained from the FASBQ administered before and after the teacher education course to provide answers to the first research question. The measures were used to investigate changes in EFL teachers' formative assessment self-efficacy. The statistical package SPSS version 26 was used for data analysis of the quantitative data. This software provides a range of statistical procedures that can handle data manipulation, descriptive statistics, and inferential statistics such as paired-sample t-tests.

For the qualitative analysis, thematic analysis was conducted on the qualitative data gathered from the FASBI. Two language-testing experts performed the thematic analysis, which involved identifying and categorizing main themes and key themes related to formative assessment self-efficacy beliefs. The qualitative data from the interviews were subjected to coding procedures, wherein the researchers assigned codes to segments of data that represented specific concepts or

ideas to provide answers to the second research question. This process allowed for organization and analysis of the qualitative data. To ensure the consistency and accuracy of the coding process, inter-rater reliability checks were performed. This involved comparing the coding decisions made by the two experts and assessing the level of agreement between them. Discrepancies or disagreements were resolved through discussion and consensus.

Results

Participants' formative assessment self-efficacy beliefs were assessed using pre- and post-intervention questionnaires. Descriptive statistics (means, standard deviations) were computed to analyze self-efficacy levels and variations. Results are shown in Table 1.

Table 1.

Descriptive Analysis of the Formative Assessment Self-Efficacy Questionnaire

	first administration		second administration	
	Mean	Std. D	Mean	Std. D
1.explaining the learning objectives of the subject to the students	4.80	1.27	5.13	.86
2.telling expectations for the students for the subject	5.43	1.10	5.66	.95
3. showing examples of good work to the class	5.43	1.22	5.76	.85
4.using formative assessment to assess students' understanding	4.86	1.40	5.33	1.09
5.using formative assessment to monitor students' progress	5.23	1.19	5.53	.97
6.using formative assessment to check students' learning	5.33	1.42	5.76	1.00
7.using students' results from formative assessment to inform teaching	5.30	1.39	5.66	.95
8.modifying teaching according to student' learning needs	5.50	1.45	5.76	1.04
9.giving differentiated assignments to students in the same class according to their abilities	4.73	1.48	5.06	1.20
10.getting students to do reflection on their work	5.00	1.31	5.40	1.10
11.using the most appropriate formative assessment for different learning objectives	4.96	1.62	5.26	1.36
12.using the most appropriate formative assessment to gather the most information about students	5.10	1.37	5.30	1.11
13.giving students feedback to improve their performance	5.26	1.38	5.46	1.10
14.giving individual feedback to students when they make serious errors	5.16	1.23	5.40	1.16
15.giving individual feedback to students when I need to explain a concept to them personally	5.36	1.37	5.60	1.35
16.encouraging my students to learn from one another	5.43	1.47	5.66	1.51
17.getting my students to work in groups during lessons	5.40	1.47	5.66	1.21
18.getting students to give each other feedback on their work	5.06	1.25	5.26	1.20
19. getting my students to do peer marking	5.16	1.36	5.43	1.16
20.getting my students to set goals for themselves	5.40	1.30	5.63	1.06
21.working with my students to help them attain their goals	6.16	.46	6.30	.53
22.ensuring students take ownership of their own learning	5.06	1.04	5.33	1.21

The results indicated that there were improvements in teachers' self-efficacy across various aspects of their teaching practices. Specifically, teachers displayed increased self-efficacy in effectively communicating learning objectives, sharing expectations, providing examples of good work, utilizing formative assessment for assessment and progress monitoring, adjusting teaching based on student needs, providing differentiated assignments, encouraging student reflection, utilizing appropriate formative assessments, gathering information through formative assessment,

providing feedback, giving individual feedback for errors and concept explanation, promoting peer learning and group work, facilitating peer feedback and peer marking, goal setting with students, and promoting student ownership of learning. These findings suggested that training program had a positive impact on teachers' confidence and abilities in implementing these teaching practices. The improvements in self-efficacy indicated that teachers felt more capable and competent in utilizing these strategies.

Results of the Interviewees

Thematic content analysis was conducted on teacher interviews to identify main themes. Teachers described their experiences in formative assessment during their education. They mentioned the impact of a socioculturally-informed teacher education course on feedback and assessment for student learning.

"I learned about the principles and theories underlying formative assessment and received practical training on implementing various formative assessment techniques."

Teachers had diverse views on formative assessment in EFL classrooms. Some were confident and used it regularly, while others needed more support. Factors like teacher-centered approaches, exam-focused culture, and limited autonomy influenced confidence. Socioculturally-informed teacher education boosted self-efficacy. One teacher's comment:

"I learned various formative assessment techniques such as questioning strategies, peer assessment, and self-assessment. This helped me to have a successful assessment of my students' learning"

Teachers' perceptions of socioculturally-informed teacher education on formative assessment: diverse classroom contexts, sociocultural elements, admin support, stakeholder involvement, parent engagement; challenges: high-stakes exams, limited resources. One teacher's insight:

"I had several challenges when implementing formative assessment strategies such as time constraints, heavy workloads, large class sizes, exam-oriented education system, and pressures from external stakeholders."

Teachers overcame challenges by engaging in open dialogues, highlighting the benefits, and gradually introducing formative assessment practices after attending the socioculturally-informed teacher education course. Strategies learned included building relationships and involving students in the assessment process. One teacher explained:

"The teacher education course provided me with practical strategies for managing time effectively, and incorporating formative assessment into my classroom routines."

Teachers highlighted the importance of adapting formative assessment strategies to the Iranian context and promoting student learning. They recognized that student diversity influenced their formative assessment practices, advocating for assessments that consider students' backgrounds, experiences, and language abilities. These factors were seen as valuable resources for enhancing formative assessment effectiveness. After implementing techniques learned in the education course, teachers noticed positive changes in student engagement, participation, motivation, and understanding. They attributed these improvements to formative assessment's immediate feedback and self-reflection opportunities. One teacher stated:

"I observed positive changes in my students' engagement and language achievement which further motivated me to continue implementing effective formative assessment practices."

In other words, formative assessment had positively affected their professional satisfaction. In this regard, another interviewee expressed:

"When I am able to make a positive impact on my students' learning, this is a driving force behind my commitment to help me implement effective formative assessment practices."

Teachers' understanding of formative assessment grew through teacher education. The course expanded their assessment knowledge and deepened their commitment to student-centered approaches. They shared specific examples of formative assessment techniques used in their EFL classrooms, such as pre-assessment, regular checks, immediate feedback, self-assessment, and goal-setting. One interviewee stated:

"I use open-ended questions to encourage critical thinking and employ group discussions and peer feedback. Additionally, I use portfolios for self-assessment and integrate technology for interactive assessments."

Teachers found the socioculturally-informed teacher education course beneficial for their professional development and understanding of students' needs. They emphasized the value of ongoing training for improving formative assessment practices. They expressed a desire for continuous learning and support to enhance their skills and stay updated. They believed sustained support would lead to long-term improvements in their teaching and student outcomes. One teacher mentioned:

"We need for follow-up workshops on formative assessment as well as collaborative networks, and useful resources to sustain the strength generated by the teacher education course we experienced."

Teachers acknowledged a greater understanding of student diversity and the significance of personalized learning environments. The teacher education course enhanced their sensitivity in responding to diverse student needs. One teacher commented:

"When I consider my students' diverse backgrounds, I try to promote equitable opportunities for learning among my learners."

The course improved teachers' pedagogical skills and strategies. It emphasized using authentic materials, real-life contexts, and culturally relevant content in lessons. This helped connect student experiences with language learning. One teacher commented:

"I do not consider formative assessment simply as a practice rather it is an integral part of my teaching."

Teachers in the course learned about collaborative learning, active student participation, and improving instructional strategies. They aimed to incorporate formative assessment, explore digital tools, and share knowledge with colleagues. Continuous learning was valued to meet students' needs. The course fostered professional collaboration and provided opportunities for exchanging ideas. Aligning assessments with goals and ethical considerations were discussed. Overall, their insights emphasized growth, engagement, and ethics in formative assessment.

Discussion

In this study, the researchers investigated the effect of a TEC on pre-service teachers' self-efficacy in formative assessment in the classroom. We chose to focus on self-efficacy because it is a malleable attribute that can be measured feasibly. Self-efficacy refers to one's beliefs in their ability to accomplish specific tasks and is considered a predictor of behavior. In the context of language assessment, self-efficacy involves teachers' confidence in their abilities to enact effective assessment practices. Our study aimed to increase and improve teachers' use of formative assessment by implementing a socioculturally-informed teacher education course.

Our analysis of pre- and post-test questionnaires showed significant improvements in teachers' self-efficacy beliefs related to formative assessment practices. Various dimensions of self-efficacy, including setting objectives, providing feedback, modifying teaching, and promoting peer learning, demonstrated high improvements. These findings suggest that the socioculturally-informed teacher education course positively influenced teachers' self-efficacy. Through interviews, we found that teachers initially had low formative assessment self-efficacy in online teaching. However, after completing the course, they reported a significant change in their

formative assessment practices. This indicates that the course had a positive impact on their formative assessment self-efficacy.

The findings of this study are consistent with previous research (Deluca et al., 2013; Koh, 2011; Koh et al., 2017; Levy-Vered & Alhija, 2018; McGee & Colby, 2014; Mertler, 2009; Randel et al., 2016; Xu & He, 2019; Yuan & Lee, 2014) in showing that educating teachers about language assessment enhances their knowledge. For example, Randel et al. (2016) found that a professional development program called Classroom Assessment for Student Learning (CASL) improved teachers' knowledge more than their real-time practice. Similarly, Levy-Vered and Alhija (2018) argued that participating in a basic language assessment program can change teachers' thoughts of assessment.

Overall, the SCT-based course in this study challenges the traditional hierarchical approaches to teacher education that present decontextualized knowledge and skills. According to Vygotsky's (1978) SCT, especially the concept of the Zone of Proximal Development (ZPD), new cognitive functions develop through two stages including intermental (interaction with others) and intramental (individual activity) (Poehner, 2009). Therefore, interaction and contextual mediation are essential for progressing from other-regulation to self-regulation (Poehner & Compernelle, 2011).

With improved self-efficacy resulting from the teacher education course, teachers became more confident in implementing various online formative assessment strategies. They also incorporated collaborative and interactive activities to enhance student engagement and foster a sense of belonging in the virtual classroom. The course helped teachers explore digital tools and platforms for efficient online assessment. Overall, teachers' formative assessment self-efficacy improvements positively influenced their online formative assessment practices.

The study findings align with existing literature on teacher professional development, emphasizing the importance of structured training and active learning opportunities in improving teachers' language assessment literacy and enabling teachers to implement fair assessment practices in classroom (Tajeddin, et. al, 2002) . Teachers' ability to self-assess may be influenced by their level of formative assessment practice. The study also highlights the essential skills required for successful formative assessment implementation, including explaining quality criteria, student-level communication, and providing meaningful feedback.

Formal teacher education courses play a significant role in fostering self-efficacy levels and improving formative assessment practices. Continuous professional development programs are crucial for updating knowledge and skills. The study reinforces the effectiveness of formal training in promoting confidence and self-efficacy. Active learning and training aligned with practice have proven to be beneficial.

In conclusion, this study demonstrates the positive impact of a socioculturally-informed teacher education course on teachers' formative assessment self-efficacy and practices. The course facilitated improvements in teachers' understanding and implementation of formative assessment in both traditional and online classrooms. Ongoing professional development and training programs are essential for sustaining these improvements and enhancing student learning outcomes.

Conclusion

This study aimed to investigate the impact of a socioculturally-informed teacher education course (TEC) on EFL teachers' self-efficacy in formative assessment practices. The results of the study showed that the TEC positively influenced teachers' formative assessment self-efficacy, which, in turn, may lead to a significant increase in their actual implementation of formative assessment strategies in the classroom.

These findings have important implications for both practitioners and teacher professional development. They emphasize the significance of the psychological mechanisms underlying teacher competence in formative assessment. Simply developing skills is not enough to ensure effective practice. Teacher education programs should focus on addressing the motivational forces related to efficacy beliefs to promote the use of formative assessment in the classroom.

Additionally, the study highlights the association between teachers' self-efficacy beliefs and their formative assessment practices. Enhancing teachers' confidence in implementing formative assessment can improve classroom practices and ultimately benefit student outcomes. To effectively implement formative assessment, it is crucial to understand the sources and levels of self-efficacy beliefs among teachers.

In summary, this study underscores the positive impact of a socioculturally-informed teacher education course on EFL teachers' self-efficacy for formative assessment, leading to improved implementation of formative assessment strategies. These findings contribute to the understanding of the psychological factors influencing teachers' use of formative assessment and have practical implications for enhancing formative assessment practices in the classroom.

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