



Research Article

# The Role of Creative and Reflective Thinking in EFL Teachers' Professional Ability

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ARTICLE INFO	ABSTRACT
<p><b>Submission History</b></p> <p>Received: 2024-07-27 Accepted: 2024-08-31</p> <p><b>Keywords</b></p> <p>Creative thinking Reflective thinking Professional ability EFL teachers</p>	<p><i>This study investigated the relationship between EFL teachers' creative thinking, reflective thinking, and their predictive ability regarding professional competence. A total of 120 Iranian EFL teachers from various language institutes in Shiraz participated in the study. Data were collected using three instruments: the Teachers' Professional Competence Questionnaire, the Reflective Thinking Questionnaire, and the Creativity Questionnaire. The results of the Pearson correlation analysis revealed a significant relationship between EFL teachers' professional ability and their reflective thinking. Furthermore, it was found that Iranian EFL teachers' creative thinking is positively correlated with their professional ability. However, no significant difference was observed in the predictability of professional ability based on reflective thinking and creative teaching. These findings, alongside similar studies, can provide policymakers with a clearer understanding of the workload and expectations placed on teachers, aiding in the development of balanced and realistic educational policies.</i></p>

## Introduction

Teachers are widely considered one of the most crucial factors in the success of any educational system. Indeed, there is often a direct connection between the quality and effectiveness of an educational system and the quality of its teachers (Miles & Neville, 2004). High-quality teachers are the most significant determinant of student achievement. According to Miles and Neville (2004), "from 40 to 90 percent of the difference in student test scores can be attributed to teacher quality. Knowing the subject matter, understanding how students learn, and practicing effective teaching methods translate into greater

student achievement" (p. 3). Therefore, it is vital that teachers are well-prepared when they enter the teaching profession and that they continue to enhance their knowledge and skills throughout their careers.

Like professionals in other fields, teachers should continuously seek to improve their knowledge and skills. However, as Miles and Neville (2004) noted, the need for quality professional development for EFL teachers has often been overlooked. The significance of teacher education extends beyond student achievement; it also has a profound impact on teachers' job satisfaction and their motivation to

remain in the profession. Teaching is a demanding and stressful career, particularly for novice teachers who must navigate the challenges of the profession while managing stressful working environments (Maggioli, 2003). Therefore, teacher educators and stakeholders responsible for preparing teacher candidates must be aware of the factors that can motivate or demotivate teachers in their careers. These stakeholders should also consider the key variables that contribute to becoming a successful teacher (Durr, 2008).

Despite the recognition of these factors, the relationships among them have not been thoroughly examined. As such, this study aims to identify some of the key determinants of successful teacher education—namely, teacher professional development, teacher professional ability, and teacher accountability—and to investigate whether there are significant relationships between these factors.

## Review of the Literature

### Professional Ability

Teacher professional ability plays a crucial role in shaping their professional identity and instructional practices. Beauchamp & Thomas (2009) suggest that professional ability acts as an organizing factor, guiding teachers in decision-making and meaning-making processes. Teachers use this ability to explain and justify their actions in the classroom, helping them understand their place in the broader educational landscape (MacLure, 2011). This framework is essential for teachers to develop an understanding of "how to be" and "how to act" in the profession (Sachs, 2005). Bullough (1997) emphasizes that professional ability is not just a static attribute but serves as the foundation for decision-making, requiring continuous development and reflection.

While teacher professional ability is recognized as a fundamental component of teacher training and development, there is no universally accepted definition of the term (Akkerman & Meijer, 2011; Beauchamp & Thomas, 2009). The literature offers various conceptualizations, often assuming the importance of professional ability without explicitly defining it (Bukor, 2011). Researchers, such as Beijaard et al. (2004) and Mockler (2011), elaborate on how professional ability is

characterized, its influences, and how it evolves. These scholars assert that teacher professional ability plays a dynamic role in shaping teachers' identities and practices.

Recent studies on professional ability highlight its role in shaping teachers' competencies in response to evolving educational demands. Baisarinova and Toleubekova (2024) focused on the development of professional competence among educators, emphasizing the role of self-awareness and reflective skills in shaping professional identity. Their study highlighted that the continuous self-reflection of educators is crucial for fostering professional growth and maintaining high standards of teaching. Through reflective practices, teachers can assess their skills and identify areas for improvement, making professional ability a dynamic and evolving aspect of a teacher's career (Baisarinova & Toleubekova, 2024). This aligns with earlier views, such as those of Bullough (1997), which stress the importance of decision-making frameworks in professional development.

Moreover, Mierlus-Mazilu and Constantinescu (2024) examined the integration of active learning methodologies in teacher training programs, particularly in the context of the United Nations' Sustainable Development Goals (SDGs). Their research emphasized the need for teachers to continuously update their professional skills to meet the demands of sustainable education. Active learning and reflection, two critical components of professional ability, were found to enhance the competencies of educators, enabling them to contribute more effectively to the educational goals outlined by the SDGs (Mierlus-Mazilu & Constantinescu, 2024). These findings suggest that professional ability in the modern era extends beyond traditional teaching skills, encompassing a broader set of competencies related to global sustainability and innovation.

### Creative Thinking

Creative thinking is another significant factor in teaching, especially in educational settings that demand innovative approaches to problem-solving. Craft (2000) defines creative thinking as the ability to go beyond conventional methods, arguing that creativity involves engagement with people, processes, and domains. These domains, in an educational context, are situations where

individuals must think outside the box to meet educational objectives. Similarly, Willings (1988) identifies three types of creative thinking: adaptive thinking, elaborative thinking, and developmental thinking. Each of these types offers different pathways for creativity, whether through connecting seemingly unrelated ideas, refining existing concepts, or expanding one's worldview.

Creative thinking has emerged as a critical skill in education, particularly as teachers are tasked with addressing increasingly complex classroom challenges. Dubinska (2024) explored how English for Specific Purposes (ESP) courses can serve as platforms for developing both creative and reflective thinking skills in students. The study highlighted that innovative approaches to teaching ESP foster deeper student engagement with the subject matter, promoting critical thinking and problem-solving. By encouraging students to think creatively within specific domains, educators can facilitate a learning environment where adaptability and innovation thrive (Dubinska, 2024). This is consistent with Runco's (2021) argument that the modern focus on creativity in education has shifted from artistic pursuits to adaptability and problem-solving in rapidly changing environments.

Pescasio (2024) also examined creative thinking in the context of higher education, focusing on general education competencies. Through a mixed-methods analysis, the study revealed that creative thinking, alongside critical thinking, is increasingly emphasized in general education curricula. Pescasio's research pointed to the growing recognition of creativity as a necessary skill in problem-solving and innovation, particularly as higher education systems evolve to meet new societal challenges. The study found that fostering creative thinking in students enables them to approach problems from diverse perspectives, thus better preparing them for the complexities of the modern world (Pescasio, 2024).

Runco (2021) argues that creativity in education has shifted from traditional artistic pursuits to a focus on problem-solving and adaptability. Teachers today are expected to demonstrate creative thinking by navigating complex, changing classroom environments. This shift makes creative thinking even more critical as teachers address new challenges, such

as integrating technology into learning and managing diverse student needs.

The ability to foster creative thinking in the classroom is closely tied to professional development. Teachers need to develop strategies that promote creative thinking not only in themselves but also in their students. Craft (2000) emphasizes that this requires teachers to continuously reflect on their teaching practices, adapt their strategies, and create opportunities for students to engage with content in creative ways.

### **Reflective Thinking**

Reflective thinking is crucial in the process of professional development and improving teaching practice. Reflection, as defined by Boud (2001), involves turning experience into learning by re-assessing past actions and integrating new insights into future practices. Boud, Keogh, and Walker (1985) describe reflection as a process of recapturing experience, attending to feelings, and evaluating that experience. The role of reflection in teaching is to help educators better understand their teaching practices and improve them based on insights gained from their reflections.

Reflective thinking remains a cornerstone of professional development in teaching. Pandey (2024) conducted a study on teachers' perceptions of reflective practice, concluding that it significantly enhances teaching skills and contributes to improvements in educational practices. The research revealed that reflective practice allows teachers to assess and modify their teaching strategies based on their experiences in the classroom. By engaging in continuous reflection, teachers can adapt their methods to better meet student needs, thereby improving educational outcomes (Pandey, 2024). This study reaffirms the importance of reflective thinking in teacher development, which was previously emphasized by Schön (1983) and Farrell (2018).

Zanazzi (2024) took this further by exploring the role of reflective practices in fostering metacognition among educators. The study demonstrated that reflective thinking not only supports the personal and professional growth of teachers but also encourages them to critically engage with educational challenges. Through reflection, educators develop a deeper understanding of their teaching processes and are better equipped to adapt to new learning environments, particularly in the context of digital

and blended learning (Zanazzi, 2024). This aligns with the broader literature that emphasizes the importance of reflective practices in helping teachers navigate the complexities of modern educational landscapes (Loughran, 2019).

Schon (1983, 1987) developed a model of reflective practice, breaking it down into four stages: reflection-in-action, reflection-on-action, reflection-for-action, and reflection-before-action. This model encourages teachers to think about their practices during teaching (reflection-in-action), after teaching (reflection-on-action), and to use these reflections to inform future teaching strategies (reflection-for-action). According to Schon (1987), reflective practice helps teachers identify problems in their instruction and make necessary adjustments, thereby fostering continuous improvement.

Loughran (2019) adds that reflective thinking is particularly important in the context of blended and online learning. The increasing integration of digital tools in education requires teachers to reflect on how best to balance traditional and digital teaching methods. Reflective practices help educators evaluate the effectiveness of their teaching strategies and adapt them to meet the demands of both in-person and online learning environments.

Farrell (2018) emphasizes the role of reflective journals in helping teachers assess their classroom practices. Writing reflections provides a structured way for teachers to evaluate their teaching methods, understand their strengths and weaknesses, and plan for future improvements. Reflective thinking is thus essential for teachers to become more self-aware and make informed decisions about their instructional strategies.

In sum, professional ability, creative thinking, and reflective thinking are all interconnected components of teacher development. Teachers need to continuously reflect on their practices, engage creatively with educational challenges, and build their professional abilities to effectively meet the evolving demands of their profession. The literature supports the idea that these three factors are critical for effective teaching, and their ongoing development is necessary for teachers to remain effective in dynamic educational environments.

The primary aim of this study is to explore the relationship between Iranian EFL teachers' professional ability, creative thinking, and

reflective thinking. By considering both creative and reflective thinking simultaneously, this study seeks to determine whether these factors contribute to improved performance among EFL teachers. Additionally, the study aims to investigate whether professional ability, creative thinking, and reflective thinking can predict Iranian EFL teachers' effectiveness in managing classroom learning. To address these objectives, the following research questions were formulated:

1. Is there any significant relationship between Iranian EFL teachers' reflective thinking and their professional competence?
2. Is there any significant relationship between Iranian EFL teachers' creative thinking and their professional competence?
3. Which of these two factors (Teachers' reflective thinking, and creative thinking) can better predict teachers' professional competence?

## Method

### Participants

The participants in this study were 120 Iranian EFL teachers who taught English at language institutes in Shiraz. They held various educational qualifications, ranging from bachelor's degrees to master's degrees. The participants were selected using non-random snowball sampling, ensuring a diverse range of demographic characteristics. The participants' ages ranged from 20 to 45, and their teaching experience varied from 2 to 15 years.

### Instruments

Several attitudinal instruments, including questionnaires, were used to achieve the objectives of the study and facilitate the data collection process. These instruments are described as follows:

The first instrument used to collect data was the Teacher Professional Competence Questionnaire. This internationally recognized scale, developed by Mousavi, Atai, and Babaii (2016) and based on the Economic Cooperation framework, is designed to assess EFL teachers' professional development. It measures teachers' professional knowledge, which includes understanding language systems, intercultural competence, assessment skills, instructional planning and management, and professional conduct. The questionnaire consists of 46 items rated on a five-point Likert scale (1 = Never, 2 =

A little, 3 = Somewhat, 4 = Much, 5 = A great deal).

The second instrument, the Reflective Thinking Questionnaire (RTQ), developed by Kember et al. (2000), contains 16 items that describe the four types of reflective thinking proposed by Mezirow (1991). The validity of this questionnaire was confirmed by Leung and Kember (2003). Each item is rated on a five-point Likert scale (1 = Disagree, 2 = Disagree with reservation, 3 = Neutral, 4 = Agree with reservation, 5 = Definitely agree).

To measure creative thinking, the study used a 60-item Likert-type questionnaire originally designed by Torrance (1979) and later validated by Abedi (1993). The concurrent validity of the questionnaire was 0.46. The reliability of the test was also measured, with the following coefficients: 0.75 for fluency, 0.61 for originality, 0.66 for flexibility, and 0.61 for elaboration. In this study, the overall reliability of the creativity test was found to be 0.77. The content validity was verified by two expert teacher-researchers.

### Data Analysis

The data collected from the teacher professional competence questionnaire, reflective thinking questionnaire, and creativity questionnaire were analyzed using a series of statistical methods. To examine the relationships between reflective thinking, creative thinking, and professional ability, a Pearson correlation analysis was conducted. In addition to correlation analysis, a multiple regression analysis was performed to determine which of the two variables—reflective thinking or creative thinking—was a better predictor of teachers' professional ability.

Prior to conducting the correlation and regression analyses, the Kolmogorov-Smirnov test was applied to assess the normality of the data. Ensuring that the data met the assumption of normality was necessary to justify the use of parametric tests such as Pearson correlation and multiple regression.

### Procedures

The study followed a structured process, beginning with the preparation and distribution of three questionnaires to each of the 120 participating EFL teachers. The questionnaires aimed to measure three key variables:

professional ability, reflective thinking, and creative thinking. The main phase of the study commenced with the researcher personally distributing the questionnaires to the participants, ensuring consistent communication and instructions across the group. Each teacher received all three questionnaires, resulting in a total of 360 questionnaires being distributed. To maximize response accuracy, participants were given ample time to complete the questionnaires, with clear guidance on how to respond to each section.

The researcher actively monitored the data collection process, maintaining direct contact with participants to address any questions or concerns and to clarify instructions as needed. This hands-on approach helped ensure a high response rate and data accuracy, as the researcher was able to address potential issues on-site and provide clarification when necessary. The personal involvement in the process also ensured that participants completed the questionnaires independently, reducing the risk of external influence on their responses.

Once all 360 questionnaires were completed and collected, the data were carefully reviewed to check for any incomplete or inconsistent responses. The researcher conducted this initial data screening to ensure the dataset was clean and reliable before proceeding to analysis. In cases where responses were missing or unclear, follow-up communication was made with the participants to clarify or complete the information.

After the data screening, the responses from the 120 teachers were entered into the Statistical Package for the Social Sciences (SPSS) software. The data entry process was meticulously supervised by the researcher to avoid any input errors. Following this, a series of statistical analyses were conducted to examine the relationships between teachers' professional ability, reflective thinking, and creative thinking. Descriptive statistics were calculated to summarize the demographic information and overall trends in the responses. Pearson correlation analyses were then performed to determine the strength and direction of relationships between the variables of interest.

Throughout the data analysis phase, the researcher ensured adherence to statistical best practices, including checking assumptions for the

Pearson correlation and verifying the reliability of the scales used in the questionnaires. The entire data collection and analysis process adhered to ethical standards, with participant confidentiality maintained at all stages of the research.

## Results

The normality of the data was assessed using the One-Sample Kolmogorov-Smirnov (K-S) test to determine if the distribution of scores for

professional ability, reflective thinking, and creative thinking significantly deviates from a normal distribution. This is a crucial assumption for conducting parametric statistical tests such as Pearson correlation and regression analyses. The test assesses the largest difference between the observed cumulative distribution of the data and the expected cumulative normal distribution. The results are shown in Table 1.

Table 1.

### *One-sample Kolmogorov-Smirnov test of normality*

		One-Sample Kolmogorov-Smirnov Test		
		Professional Ability	Reflective Thinking	Creative Thinking
N		120	120	120
Normal Parameters <sup>a</sup>	Mean	116.25	68.16	106.25
	Std. Deviation	19.584	15.567	16.349
Most Extreme Differences	Absolute	.115	.088	.163
	Positive	.115	.088	.163
	Negative	-.113	-.072	-.073
Test Statistic		.115	.088	.088
Asymp. Sig. (2-tailed)		.200 <sup>cd</sup>	.108 <sup>cd</sup>	.214 <sup>cd</sup>
a. Test distribution is Normal.				
b. Calculated from data.				
c. Lilliefors Significance Correction.				
d. This is a lower bound of the true significance.				

The One-Sample Kolmogorov-Smirnov Test was used to evaluate the normality of the distributions for Professional Ability, Reflective Thinking, and Creative Thinking. The results show that the Test Statistic values for all three variables are relatively small, indicating that there is no extreme deviation from normality. The p-values for Professional Ability (0.200), Reflective Thinking (0.108), and Creative Thinking (0.214) are all greater than 0.05, which suggests that the null hypothesis of normality cannot be rejected. This means that the distributions of the three variables do not significantly deviate from a

normal distribution. Consequently, the assumption of normality is satisfied, allowing for the use of parametric tests like Pearson correlation and multiple regression in further analyses.

In order to verify the first research question of the study in finding whether Iranian EFL teachers' reflective thinking plays any role in their professional ability, a Pearson correlation was conducted between the EFL teachers' professional ability and their reflective thinking. The results are shown in Table 2.

Table 2.

### *Pearson correlation between EFL teachers' professional ability and their reflective thinking*

		Professional Ability	Reflective Thinking
Professional Ability	Pearson Correlation	1	.482 <sup>**</sup>
	Sig. (2-tailed)		.000
	Sum of Squares and Cross-products	935.550	7.100
	Covariance	11.842	.090
	N	120	120

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The results of Pearson correlation showed that there is a positive moderate significant

relationship ( $r = .48$ ,  $p < .01$ ) between EFL teachers' professional ability and their reflective



thinking. Thus, the first research question of the study was verified.

To investigate the second research question of the study in finding whether Iranian EFL teachers' creative thinking plays any role in their

professional ability, a Pearson correlation was performed between EFL teachers' professional ability and their creative thinking. The results are shown in Table 3.

Table 3.

*Pearson correlations between EFL teachers' professional ability and their creativity*

	Professional ability	Creative Thinking
Professional ability	Pearson Correlation 1	.544**
	Sig. (2tailed)	.000
	N	120

\*\* . Correlation is significant at the 0.01 level (2-tailed).

As shown in Table 3, the Pearson correlation between EFL teachers' professional ability and their creative thinking is .54, and the p-value was .000 (at the 0.01 level), hence; the Pearson analysis reported a positive significant relationship between the two variables. Therefore, Iranian EFL teachers' creative thinking is positively related to their professional ability, and the second research question of the study was verified.

In order to investigate the third research question of the study in finding which of the two factors (teachers' reflective thinking, creative thinking) can better predict teachers' professional ability, a multiple regression was performed. Table 3 provides the extent to which variability in the dependent variable (teachers' professional ability) is accounted for by the independent variables (teachers' reflective thinking and creative thinking).

Table 4.

*Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.758 <sup>a</sup>	.575	.562	.3976

Predictors: (Constant), reflective thinking, and creative thinking

Concerning Table 3, the coefficient of multiple correlations is presented in the "R" column. R is the measure of the prediction of the dependent variable; in this case, professional ability. A value of 0.75 indicates a good level of prediction. The "R Square" or R<sup>2</sup> value is the proportion of variance in the teachers' professional ability that can be explained by the independent variables (i.e., teachers' reflective thinking and creative

thinking). It indicates that teachers' reflective thinking and creative thinking explain 57% of the variability of teachers' professional ability.

In order to determine whether the provided model (teachers' reflective thinking and creative thinking as independent and teachers' professional ability as dependent variable) is a good fit for the data, a one-way ANOVA was performed. The results are shown in Table 5.

Table 5.

*ANOVA of Regression Model*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.078	2	2.539	47.56	.000 <sup>b</sup>
	Residual	144.289	117	5.344		
	Total	149.367	119			

Dependent Variable: Professional ability

Predictors: (Constant), Reflective Thinking and Creative Thinking

The F value in Table 4 verifies the fitness of the overall regression model for the data. The result shows that (F = 47.56, p = 0) p-value is lower than the assumed level of significance (i.e., 0.05);

therefore, EFL teachers' reflective thinking and creative thinking can significantly predict their teachers' professional ability (i.e., the regression model is a suitable method for analyzing of the

data). Table 6 shows the information about the model coefficients. The general form of the model is to predict EFL teachers' professional

ability from their teachers' reflective thinking and creative thinking.

Table 6.

*Coefficients of the Model*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.531	3.197		-.166	.025
Reflective Thinking	-.193	.224	-.123	-.862	.392
Creative Thinking	.212	.154	.178	1.375	.173

a. Dependent Variable: Professional ability

The coefficients in the above table show how much EFL teachers' professional ability variable varies with their teachers' reflective thinking and creative thinking when the other independent variable is constant. As can be seen in the above table, there is no significant difference ( $p > .05$ ) in the predictability of EFL teachers' professional ability from their reflective thinking and creative teaching. Thus, the third research question of the study was verified.

## Discussion

The results of the Pearson correlation analysis revealed a significant relationship between EFL teachers' professional ability and their reflective thinking. This finding aligns with prior research, which emphasizes the importance of professional ability in shaping teacher identity and decision-making processes (Beauchamp & Thomas, 2009; MacLure, 2011). Professional ability serves as an organizing framework that enables teachers to reflect on their instructional practices, develop meaningful insights, and adapt to the evolving demands of the educational environment (Bullough, 1997). However, the results extend this understanding by highlighting how professional ability is not only influenced by reflective thinking but also contributes to a teacher's capacity to engage in reflective practices in real time (Freeman, 1989).

This finding corroborates previous studies that emphasize the role of reflective thinking in fostering professional growth. Boud et al. (1985) noted that reflection enables teachers to reassess their actions and integrate new insights into their future practices. This aligns with Schön's (1983, 1987) model of reflective practice, where teachers reflect on their actions during and after teaching, making continuous improvements to their

strategies. The current study reinforces the idea that reflective thinking is integral to teachers' professional development, allowing them to better understand and enhance their teaching methods.

Moreover, the present study's findings support the research of Pandey (2024) and Zanazzi (2024), who highlighted the crucial role of reflective practice in teacher growth. Pandey (2024) found that reflection significantly enhances teaching skills by enabling educators to modify their strategies based on classroom experiences. Zanazzi (2024) further demonstrated that reflective practices not only improve teaching performance but also foster metacognition, helping teachers critically engage with new challenges, particularly in digital learning environments. These findings suggest that reflective thinking is a dynamic and evolving process, essential for teachers to remain effective in the ever-changing educational landscape.

In addition to reflective thinking, the results indicated a positive relationship between creative thinking and professional ability. However, no significant difference was found in the predictability of professional ability based on reflective thinking or creative teaching. This outcome may be explained by the evolving nature of professional competence, as teachers with higher levels of professional development likely possess a stronger commitment to their profession, which in turn enhances their creative thinking abilities (Urbanski, 1998). Creative thinking, defined by Craft (2000) as the ability to engage with processes and people in novel ways, has become increasingly important in education, where teachers must navigate complex and dynamic classroom environments (Runco, 2021).



The study's findings align with recent research on creative thinking in education. For instance, Dubinska (2024) showed that English for Specific Purposes (ESP) courses foster both creative and reflective thinking in students, reinforcing the idea that creative approaches promote deeper engagement and problem-solving. Similarly, Pescasio (2024) highlighted the growing emphasis on creativity in higher education, where it is seen as a critical skill for addressing new societal challenges. The current study supports these findings, suggesting that creative thinking plays a significant role in the professional development of teachers. However, it also underscores that creativity alone may not fully predict professional ability, indicating the need for a more holistic approach to understanding teacher competence.

Furthermore, the relationship between professional ability and creative thinking underscores the importance of continuous professional development. Mierlus-Mazilu and Constantinescu (2024) examined how active learning methodologies and reflective practices can enhance teachers' competencies, particularly in the context of sustainable education. Their findings suggest that teachers who engage in creative and reflective thinking are better equipped to meet the goals of global education initiatives, such as the United Nations' Sustainable Development Goals (SDGs). The current study adds to this by showing that teachers' creative thinking is intertwined with their professional growth, although it may not independently predict professional ability.

These results also echo the findings of Black (2008), who observed that teachers with limited creativity exhibited restricted pedagogical content knowledge (PCK). While Black's study focused on the relationship between creativity and PCK, the present study expands this understanding by linking creative thinking to broader aspects of professional ability. However, the non-significant predictability of professional ability from reflective thinking and creative teaching suggests that other factors, such as emotional resilience, job satisfaction, or institutional support, may play critical roles in determining overall professional competence.

Overall, this study contributes to the existing literature by offering a more nuanced understanding of how professional ability, reflective thinking, and creative thinking interact.

It challenges previous assumptions of a linear relationship between these factors and teaching efficacy, pointing to the complexity of professional development in the field of education. As Sachs (2005) and Akkerman & Meijer (2011) noted, professional ability is not a static attribute but one that requires ongoing reflection and adaptation. In line with Baisarinova and Toleubekova (2024), who emphasized the role of self-awareness and reflection in professional growth, this study suggests that teacher professional ability evolves through continuous engagement with creative and reflective practices.

However, the findings also highlight potential challenges, such as the risk of burnout, as noted by Durr (2008). Teachers who are deeply committed to their professional development and creative thinking may internalize the responsibility for student outcomes, leading to stress and emotional fatigue. Future research should investigate how professional development programs can support teachers in balancing the demands of creativity, reflection, and emotional well-being, ensuring that they maintain their professional ability without experiencing burnout.

## Conclusion

The findings of this study provide significant support for the notion that EFL teachers' professional ability plays a crucial role in influencing their reflective and creative thinking. Teachers with higher levels of professional ability demonstrated a stronger capacity for reflection and creativity, indicating that professional development fosters these critical skills. Reflective thinking, as shown by previous research, enables teachers to continuously evaluate and improve their instructional strategies, while creative thinking allows them to navigate complex, evolving educational contexts with innovative solutions. However, a key finding of this study is that neither reflective nor creative thinking independently predicted significant differences in teachers' professional ability, suggesting that these factors, while important, are not the sole determinants of professional growth.

One interesting outcome of the study is the homogeneity observed among participants in their attitudes toward professional ability, reflective thinking, and creative thinking. This suggests that, despite individual differences in

experience or teaching context, teachers in this study shared a consistent perception of how these factors contribute to their professional development. This homogeneity may reflect broader trends in teacher training and development in the Iranian EFL context, where professional norms and expectations are relatively uniform across different institutions. However, this uniformity also raises questions about how generalizable these findings are to other educational settings with more diversity in teaching philosophies, methods, and professional development opportunities.

The implications of these findings are significant for both educational theory and practice. First, the results highlight the importance of integrating professional ability, reflective thinking, and creative thinking into teacher training programs. Teachers who engage in reflective and creative practices are better equipped to enhance their students' language proficiency, success, and motivation. By fostering these skills, teacher development programs can contribute to more effective language teaching, ultimately leading to improved student outcomes.

Moreover, the study underscores the need for curriculum and syllabus designers to consider the role of the teacher in the decision-making process. A teacher-informed syllabus that provides flexibility for teachers to apply their creativity and professional knowledge can enhance the implementation of educational materials. This stands in contrast to more rigid, authoritative systems that limit teacher autonomy. By giving teachers more room to exercise their professional judgment, curricula can become more adaptable to students' needs and teachers' strengths, fostering a more dynamic and responsive educational environment.

Furthermore, the findings have important implications for teacher evaluators and educational policymakers. Understanding the interplay between professional ability, reflective thinking, and creative thinking can provide deeper insights into the characteristics that influence teaching effectiveness. Evaluators and policymakers can use this information to design more holistic evaluation systems that account for a teacher's reflective and creative capacities in addition to traditional measures of performance. This, in turn, could lead to more accurate assessments of teaching quality and help identify

areas where teachers might need additional support or professional development.

Despite these contributions, several limitations must be acknowledged. First, the sample was relatively homogenous, with all participants being Iranian EFL teachers. This homogeneity limits the generalizability of the findings to broader populations, especially in more diverse educational contexts. Future research could expand the sample to include teachers from different cultural and linguistic backgrounds, as well as various teaching environments, to explore whether the relationships observed in this study hold across different educational settings.

Second, the study relied on self-reported data, which may introduce bias due to participants' subjective perceptions of their own abilities and practices. Although self-report measures provide valuable insights, they may not fully capture the complexities of teachers' reflective and creative processes. Future studies should incorporate more objective measures, such as classroom observations or assessments of student outcomes, to triangulate the data and offer a more comprehensive view of the factors influencing teachers' professional development.

Additionally, the cross-sectional design of the study limits the ability to draw causal conclusions about the relationships between professional ability, reflective thinking, and creative thinking. While correlations were observed, it remains unclear whether higher professional ability leads to increased reflection and creativity, or whether the reverse is true. Longitudinal studies would be valuable in exploring the directionality of these relationships over time and examining how professional development evolves through sustained reflective and creative practice.

Finally, while this study focused on professional ability, reflective thinking, and creative thinking, other factors may also play significant roles in shaping teacher effectiveness. Emotional intelligence, resilience, and institutional support are just a few of the potential variables that could mediate the relationship between professional ability and teaching performance. Future research should explore these additional factors to develop a more comprehensive understanding of teacher development.

In conclusion, this study has provided valuable insights into the complex relationships between

professional ability, reflective thinking, and creative thinking among EFL teachers. While these factors are interrelated and contribute to teacher growth, they do not fully explain variations in professional ability, suggesting that other variables may also play a critical role. The findings have important implications for teacher training, curriculum development, and educational policy, but further research is needed to confirm these results and explore the broader context of teacher development. By addressing these gaps, future studies can help create more effective, holistic approaches to teacher education that enhance not only professional competence but also the well-being and long-term success of teachers and students alike.

## References

- Abedi, J. (1993). Creativity and new ways of measuring it. *Psychological Research*, 2(1-2), 56-54.
- Akkerman, S. F., & Meijer, P. C. (2011). A dialogical approach to conceptualizing teacher identity. *Teaching and Teacher Education: An International Journal of Research and Studies*, 27(2), 308-319.
- Baisarinova, A., & Toleubekova, R. (2024). Developing professional competence and self-awareness among social educators. *Scientific Herald of Uzhhorod University*. Retrieved from [https://physics.uz.ua/web/uploads/pdf/2939-2948\\_Baisarinova&Toleubekova.pdf](https://physics.uz.ua/web/uploads/pdf/2939-2948_Baisarinova&Toleubekova.pdf)
- Dubinska, A. (2024). Exploring the potential of ESP courses for developing soft skills in students. *BEK 74.58 Я431 H34*, 2024. Retrieved from [https://www.academia.edu/download/114506833/V23\\_2024.pdf#page=201](https://www.academia.edu/download/114506833/V23_2024.pdf#page=201)
- Mierlus-Mazilu, I., & Constantinescu, S. (2024). Service-learning for sustainable energy access: Integrating active learning and SDGs in higher education. *ICMASE Proceedings*. Retrieved from <https://icmase.com/uploadfiles/files/7604e799-0a3f-46a8-b48a-d3f05b8dcd6a.pdf>
- Pandey, S. R. (2024). Perception of teachers on reflective practice. *Tejganga Darpan*. Retrieved from <https://nepjol.info/index.php/td/article/download/69202/52820>
- Pescasio, M. (2024). Evaluating critical and creative thinking (CRITHNK): Student perspectives on general education competencies through mixed methods analysis. *ResearchGate*. Retrieved from [https://www.researchgate.net/profile/Marilyn-Pescasio/publication/383093224\\_Evaluating\\_Critical\\_and\\_Creative\\_Thinking\\_CRITHNK\\_Student\\_Perspectives\\_on\\_General\\_Education\\_Competen](https://www.researchgate.net/profile/Marilyn-Pescasio/publication/383093224_Evaluating_Critical_and_Creative_Thinking_CRITHNK_Student_Perspectives_on_General_Education_Competen)
- [cies\\_Through\\_Mixed\\_Methods\\_Analysis/links/66bc56f98f7e1236bc55be6a/Evaluating-Critical-and-Creative-Thinking-CRITHNK-Student-Perspectives-on-General-Education-Competencies-Through-Mixed-Methods-Analysis.pdf](https://www.researchgate.net/publication/383093224_Evaluating_Critical_and_Creative_Thinking_CRITHNK_Student_Perspectives_on_General_Education_Competen)
- Zanazzi, S. (2024). Ariadne's thread: Metacognition for emancipatory rationality in education. *International Conference on Innovative Research in Education*. Retrieved from <https://sfera.umife.it/handle/11392/2558030>
- Beauchamp, C. & L. Thomas (2009). Understanding teacher identity: An overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education*, 39(2), 175-89.
- Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and teacher education*, 20(2), 107-128.
- Black, J. (2008). Content knowledge and pedagogical content knowledge of Algebra teachers and changes in both types of knowledge as a result of professional development. *Proceedings of the fifth Annual TEAM-Math Partnership Conference Pre-Session*. 30 - 40.
- Boud, D. (2001). Avoiding the traps: Seeking good practice in the use of self-assessment and reflection in professional courses. *Social Work Education*, 18, 121-132.
- Boud, D., Keogh, R., & Walker, D. (1985). *Reflection: Turning experience into learning*. London: Kogan Page.
- Bukor, E. (2011). *Exploring teacher identity: Teachers' transformative experiences of re-constructing and re-connecting personal and professional selves*. Unpublished Ph.D. Dissertation. Toronto: University of Toronto, Ontario Institute for Studies in Education. <http://hdl.handle.net/1807/31700>
- Bullough Jr., R. V. (1997). Pedagogical content knowledge circa 1907 and 1987: A study in the history of an idea. *Teaching and Teacher Education*, 17(6), 655-666.
- Chirema, K. D. (2007). The use of reflective journals in the promotion of reflection and learning in post-registration nursing students. *Nurse Education Today*, 27(3), 192-202.
- Cochran-Smith, M., S. Feiman-Nemser, J. McIntyre. (2008). *Handbook of research on teacher education: Enduring questions and changing contexts*. London: Routledge.
- Craft, A. (2000). *Creativity across the primary curriculum: Framing and developing practice*. London: Routledge.
- Danielewicz, J. (2001). *Teaching selves: Identity, pedagogy, and teacher education*. Suny Press.

- Díaz-Maggioli, G. H. (2003). *Professional development for language teachers*. Eric Digest EDO-FL-03-03.
- Durr, A. J. (2008). *Identifying teacher capacities that may buffer against teacher burnout*. Unpublished doctoral dissertation. The Ohio State University. Retrieved from: <http://etd.ohiolink.edu/send-pdf.cgi/DurrAnthonyJohn.Pdf?OSU/227554195>.
- Faculty of Public Health (2009). *Continuing professional development (CPD) - CPD Policies, Processes, and Strategic Direction*. London: Faculty of Public Health.
- Farrell, T. S. (2018). *Reflective language teaching: Practical applications for TESOL teachers*. Bloomsbury Publishing.
- Freeman, D. (1989). Teacher training, development, and decision-making: a model of teaching and related strategies for language teacher education. *TESOL Quarterly*, 23(1), 27-45.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. London: Fontana.
- Hiep, P. H. (2001). Teacher development: A real need for English departments in Vietnam. *English Teaching Forum*, 39(4), 30-33.
- Kember, D., Leung, D., Jones, W., & Loke, A. (2000). Development of a questionnaire to measure the level of reflective thinking. *Assessment & Evaluation in Higher Education*, 25(4), 381-395.
- Leung, D. Y., & Kember, D. (2003). The relationship between approaches to learning and reflection upon practice. *Educational psychology*, 23(1), 61-71.
- McDiarmid, G. W., & Clevenger-Bright, M. (2008). Rethinking teacher capacity. In Cochran-Smith, Feiman-Nemser, McIntyre & Demers (Eds.), *Handbook of Research on Teacher Education: Enduring Questions in Changing Contexts* (pp. 134-156). New York: Routledge, Taylor & Francis Group and the Association of Teacher Educators.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. Jossey-Bass, 350 Sansome Street, San Francisco, CA 94104-1310.
- Miles, W., & Neville, K. (2004). *Teacher professional development: A primer for parents & community members*. Public educational network. Columbia.
- Mocklur, N. (2011). Beyond 'what works': Understanding teacher identity as a practical and political tool. *Teachers and Teaching*, 17, 517-528. doi:10.1080/13540602.2011.602059
- Mousavi, M. A., Atai, M. R., & Babaii, E. (2016). Exploring standards and developing a measure for evaluating Iranian EFL teachers' professional competence in the private sector. *Iranian Journal of English for Academic Purposes*, 5(2), 30-59.
- National Council for the Accreditation of Teacher Education (NCATE, 2003). Quantity over quality. *NCATE Spring Newsletter*, 11(4), 4-5.
- Rex, L. A., & Nelson, M. C. (2004). How teachers' professional identities position high-stakes preparation in their classrooms. *Teachers College Record*, 106(6), 1288-1331.
- Sachs, J. (2005). *The end of poverty: Economic possibilities for our time*. New York: Penguin
- Schön, D. A. (1938). The reflective practitioner. *New York, 1083*.
- Schön, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. Jossey-Bass.
- Stahlhut, R., Hawkes, R., & Fratianni, J. (1988). Coaching student teachers to elicit mentor role behaviors from their cooperating teachers. *Paper presented at the annual meeting of the American Association of Colleges of Teacher Education*. New Orleans.
- Torrance, E. P. (1984) *Mentor relationships: how they aid creative achievement, endure, change and die*. Buffalo, NY: Bearly.
- Urbanski, A. (1998). Teacher professionalism and teacher accountability: Toward a more genuine teaching profession. *Educational Policy*, 12(4), 449 - 457.
- Willings, D. (1988). The creative mind. *Gifted Education International*, 5(3), 142-147.