

Developing Teacher Education Performance Assessment through Teaching E-portfolios and Pre-service/ In-service EFL Teachers' Self-reflection

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DOI: 10.26907/esd.16.4.02

Submitted: 28 November 2020; Accepted: 28 May 2021

Abstract

A portfolio is a document describing skills, experience, interests or knowledge of an individual. Recently, the conventional paper-based portfolio has been no longer able to keep pace and therefore, some researchers have suggested e-portfolios overcome this weakness. It is rare to find research on e-portfolio for managing certification of professional competence. Considering that developing an Education Teacher Performance Assessment (edTPA) teaching e-portfolio helps teachers to become more reflective in their teaching, the present study tried to merge this issue by exploring the effects of developing edTPA teaching e-portfolios on pre-service and in-service teachers' self-reflection in a teacher preparation program in the Iranian EFL context. The researchers employed a sequential explanatory mixed methods approach. A self-reflection survey was administered to 100 EFL pre-service and in-service teachers. The participants developed edTPA teaching portfolios with three specific types of tasks (planning, instruction, and assessment) in their classrooms. After the teaching classroom, a self-reflection survey was administered as a posttest. Then six of the participants were surveyed using a follow-up interview. The results of the study showed that there was a significant improvement in the EFL teachers' self-reflection in both groups through developing three types of edTPA and underlying five factors of reflection in their teaching. Research on edTPA as a tool measures teacher readiness and reflection. Further research efforts should focus on edTPA performance, teacher evaluation and student performance to add to the professional discourse on teacher preparation, teacher quality, and policy making.

Keywords: teacher education performance assessment; in-service and pre-service program; self-reflection; teaching E-portfolio.

Формирование системы оценивания эффективности педагогического образования на основе электронного портфолио преподавателя и самоанализа преподавателей английского языка как иностранного в период до начала и в процессе работы

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DOI: 10.26907/esd.16.4.02

Дата поступления: 28 ноября 2020; Дата принятия в печать: 28 мая 2021

Аннотация

Портфолио представляет собой документ, отражающий навыки, опыт, интересы и знания индивида. В настоящее время классические бумажные портфолио утратили свою актуальность, в связи с чем ряд исследователей рекомендует использовать электронные портфолио. На данный момент отмечается недостаток исследований, посвященных вопросам ведения электронного портфолио, необходимого для подтверждения документов, удостоверяющих владение профессиональными компетенциями. Разработка электронного портфолио учителя для оценки эффективности преподавания (eTPA) способствует повышению уровня рефлексии учителя. В настоящем исследовании изучается влияние электронного учительского портфолио на рефлексию иранских преподавателей, обучающихся по программе «Преподавание английского языка как иностранного» (EFL). В исследовании был применен подход, основанный на смешанных методах. Среди 100 будущих и действующих преподавателей EFL был проведен опрос. Испытуемые в качестве самоанализа представили в формате eTPA портфолио, включающее три конкретных типа заданий (разработка планов, преподавание и оценивание) в своих классах. По окончании занятий в качестве итогового тестирования был проведен самоанализ. Шесть участников прошли также опрос в форме контрольного интервью. Результаты исследования выявили значительное улучшение саморефлексии преподавателей EFL благодаря разработке трех типов eTPA и использованию пяти принципов рефлексии. Необходимо провести дальнейшие исследования эффективности eTPA, оценивания учителей и успеваемости учеников, с целью расширения профессионального дискурса, посвященного подготовке учителей, качеству преподавания и формированию политики в этой области.

Ключевые слова: оценка эффективности педагогического образования; программа в период до начала и в процессе работы; рефлексия; электронное портфолио учителя.

Introduction

Providing experiences to gather evidence of readiness to teach, developing confidence in teachers' abilities to teach, and the quality of education is affected by the quality of teachers' work. The importance of qualified teachers in educational systems provides insights into the importance of the characteristics of pre-service and in-service teacher education programs (Cochran-Smith & Fries, 2005; Hagger & McIntyre, 2006). Various performance assessments have emerged, which can provide feedback to teacher education programs about the strengths and weaknesses of their candidates as well as evidence for teacher licensing and certification. Education Teacher Performance Assessment (edTPA) was designed to provide information for program improvement through the use of a common set of performance assessments for teachers and has also been adopted by states and districts for summative evaluation purposes (Knight et al., 2014).

Portfolios have been used in educational purposes and spaces for a long time. For instance, they have been used in enhancing students' learning and guiding self-assessment (Darling-Hammond, 2012; Lam, 2018). More recently, it has been claimed that e-portfolios can foster a new approach to thinking about digital literacy. The online curriculum has replaced the traditional way of developing and collecting one's work (O'Rourke, 2016). Teacher preparation programs can collect evidence of pre-service teachers' pedagogical skills, reflections, and their confidence of teaching decisions and practices by requiring them to develop a teaching portfolio (Lyons, 1998; Shulman, 1986). The edTPA addresses one teaching portfolio that affords teachers the space to intentionally select authentic artifacts that represent their decisions and practices from the context of classrooms in which they are student teaching. Furthermore, through the development of the edTPA teaching portfolio, teachers are provided with opportunities to reflect on their artifacts (e.g., planning, instruction, and assessment decisions).

Through the reflective space provided within a teaching portfolio, teachers are able to explain, describe, justify, and analyze their teaching decisions and practices (Stanford Center for Assessment, Learning & Equity, 2020). Reflective practice is used in teacher education to empower pre-service EFL teachers to learn from their experiences. At the point when reflective practice is employed in teaching practice, it is believed it can advance professional development by integrating theoretical knowledge and professional practice (Yalcin Arsalan, 2019).

Dewey (1933), the established father of the idea of reflection, considers reflective practice as an "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends" (p.6). Another significant idea which extensively contributes to teachers' effectiveness and achievement is self-reflection.

The purpose of this study was to investigate the effects of developing edTPA as a teaching e-portfolio on pre-service and in-service teachers' self-reflection, specifically their perceptions of confidence related to the edTPA's constructs of planning, instruction, and assessment within a tied-to-licensure state. In the mid-1980s, the notion of teaching portfolio explored by teacher preparation programs as a summative performance assessment to show their readiness to teach and their ability to successfully consider their teaching practices. Shulman (1986) defines a teaching portfolio as an assortment of authentic artifacts such as lesson plans and learners work samples which purposefully chosen by the teacher to reflect on their teaching and their effects on learners' learning. Pre-service teachers can clarify, describe, explain, and analyze their teaching intentions and practices through reflective practice provided within a teaching portfolio (Stanford Center for Assessment, Learning & Equity, 2020).

Additionally, to reflect on and assess teachers' decisions and practices, teachers need an assigned space to do so, and the chance to self-reflect should be given and valued as a part of her academic and pedagogical knowledge (Frunzeanu, 2014). Teacher education performance assessment (EdTPA) develops a teaching portfolio in which pre-service teachers have the opportunity to reflect on their teaching through three components of EdTPA (planning, instruction, and assessment).

Review of the Related Literature

Teaching portfolios and Professional Development

A teacher portfolio is a factual description of a teacher's strengths and teaching achievements (Seldin, Miller, & Seldin, 2010). It can also stimulate reflection upon improvement. Teacher portfolios not only provide teachers with the tools for self-assessment, but also serve as tools for teachers' own professional development (Seldin et al., 2010). Teaching portfolios have become commonplace in 1980s with the growth and cumulative development of individual teachers and teaching profession. Various claims have been made about its benefits for teachers (Bird, 1990). It has been claimed that teaching portfolios encourage student teachers to pay more attention to their teaching and think more deeply about theories that help their practices. Teaching portfolios provide a situation for teachers to become more self-confident about their teaching, coming from three ideas of (a) constructing (b) mentoring and collaboration that are associated with portfolio construction, and (c) the feedback provided on the portfolio (Darling-Hammond, 2010; Wolf, 1994).

A fuller description of the nature and quality of portfolio use will empower teachers to increase their understanding in the future of the relationships between the way in which the teaching portfolio is conceptualized and implemented and its value as an assessment and/or professional development tool. The two most significant purposes of teaching portfolios are the learning portfolio in pre-service teacher education and making standard based assessment of prospective teachers' readiness for their teaching license (Wolf & Dietz, 1998).

Portfolios are progressively being utilized to stimulate teachers' reflections. Frameworks for reflection on teaching often emphasize abilities and practices. However, there are other important aspects of teacher functioning, such as the teaching environment and individual teachers' beliefs, professional identity and mission.

EdTPA Teaching E-portfolio and Teacher Reflection

According to Garratt (2011) e-portfolios are digitalized collection of artifacts that represent an individual, group or institution's demonstrations, learning, resources, and achievements. Abrami, and Barrett (2005) stated that the e-portfolio is an instrument to capture, compare and develop skills, competence of human resources, and lifelong learning. They can store all kinds of information in digital form to provide a flexible self-evaluation tool. Some researchers believe that the greatest value in teaching e-portfolio development is reflection (Strudler & Wetzel, 2012). Samaras and Fox (2013) noted that e-portfolio without reflection is just a multimedia presentation, or a fancy electronic resume, or a digital scrapbook.

Through a process of reflection student teachers are able to identify and take responsibility for their own learning (Orland-Barak's, 2005) and change their idea of what reflection in the e-portfolio entails, the purposes of reflection, and their own significant parts throughout the process (Simatele, 2015). Reflection as a special type of thought and

e-portfolio as a tool for reflection provide an important condition for teachers to use process function and effective assessment instruments for their learning purposes and professional development (Slepcevic-Zach & Stock, 2018).

Some researchers such as Imafuku et al. (2018), and Cowan and Peacock (2017), believed that e-portfolios in teacher education are influential tools for encouraging reflective thinking when followed by good developmental values. They enhance reflective options such as self-managed experiential learning and self-directed feedback. Furthermore, they support the development of higher-level abilities among all pre-service and in-service teachers.

Using e-portfolios can enhance educative teacher performance assessment tasks which should be contextualized, and lead to enhance self-reflection and professional development. Farrell (2018) mentioned various types of activities that can enhance EFL teachers' reflection such as, teaching metaphors, teacher' beliefs, action research and written journals.

Reflective practice greatly reshapes teachers' knowledge of teaching and learning throughout their teaching process. These teachers can compose their thoughts of teaching and talk about them with other teachers (Farrell & Kennedy, 2019). For the purpose of this research, the researchers reviewed and used written journals and enhanced three tasks of edTPA recommended to be used to investigate EFL pre-service and in-service teacher's reflective abilities by using teaching e-portfolios as a tool.

Many researchers have reported contributions of reflection to teaching and teacher development. Babaei and Abednia (2016) examined the relationship between reflective teaching and teachers' self-efficacy beliefs. The result showed that reflective teaching and self-efficacy beliefs were found to have a significant positive relationship. Moreover, the result also showed that incorporating a focus on (metacognitive) reflection into second language teacher education and professional development helps improve teachers' pedagogical competencies and efficacy beliefs.

Zahid and Khanan (2019) examined the effect of reflective teaching practices on prospective teachers' performance and have supported the notion of previous researches that reflective thinking improves quality of teaching skills. It was found that the training had improved the skills and performance of teachers during training as they revised and modified their teaching strategies through reflective practice.

Zhang, Hawk, and Zhao (2016) directed a study with pre-service teachers in the phase of teacher education. The outcomes indicated that pre-service teachers' professional identity impacted program performance by affecting their task value belief and extrinsic learning motivation. Zhao and Zhang (2017) also emphasized the influence of field teaching practice on pre-service teachers' professional identity. The results from their quantitative data showed that, pre-service teachers' professional identity increased after the field teaching practice; specifically, intrinsic value identity increased, but extrinsic value identity did not significantly change. The results validated and elaborated the results of quantitative data in more detail with regard to changes in professional identity.

Tasks of EdTPA Teaching E-portfolio

The most striking component of edTPA is represented within portfolio of three tasks illustrated in figure 1 (Stanford Center for Assessment, Learning & Equity, 2020) is as follows:

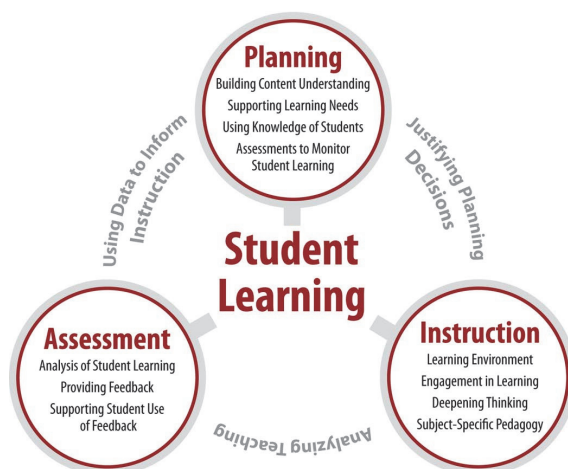


Figure 1. EDTPA Tasks (Stanford Center for Assessment, Learning & Equity – SCALE, 2020)

- *Planning for Instruction and Assessment.* In this task, teachers submit artifacts that incorporate lesson plans and materials for students to create and develop knowledge of content; differentiation of learning tasks to attend to students' diverse learning needs and personal, cultural, and/or community assets; opportunities for students to learn and use academic language; and assessments to monitor and support students' learning.

- *Instructing and Engaging Students in Learning.* In the instruction task, teachers submit video evidence that exhibits the following issues: A positive, safe learning condition; engagement of students when learning the content; consideration of higher-order questioning; demonstration of pedagogical skills (e.g., modeling an essential literacy strategy and providing opportunities for students to practice), investigating teaching effectiveness (i.e., reflecting);

- *Assessing Student Learning.* In the final assessment task, teachers provide evidence for the analysis of their students' learning by describing trends and patterns for the whole class and individual students; specific, content-related feedback for their students,

Based on Stanford Center for Assessment, Learning and Equity (2020), each pre-service and in-service teachers' edTPA teaching e-portfolio is assessed with 15 rubrics, and each rubric has five levels. The levels indicate:

Level 1: represents unsatisfactory for a beginning teacher;

Level 2: represents emerging for a beginning teacher;

Level 3: represents satisfactory for a beginning teacher;

Level 4: represents accomplished for a beginning teacher; and

Level 5: represents highly accomplished for a beginning teacher

One of the most important challenges facing public education is to be sure that the inexperienced teacher is prepared to meet the academic needs for all students. The edTPA can be perceived as a teaching portfolio to increase pre-service teachers' assurance to develop strategies based on students' needs, problems, and develop their abilities to reflect on their lesson plans, instruction, and assessment. This study investigated the effects of developing edTPA (educative teacher performance assessment) teaching e-portfolio on in-service and pre-service teachers' self-reflection in a teacher preparation program in the Iranian EFL context. The development of teaching e-portfolios has been shown to increase in-service and pre-service teachers' confidence to solve classroom-related problems,

develop strategies to meet their students' needs, deepen their abilities to reflect, and have professional conversations with others. The edTPA can be recognized as a teaching portfolio in that in-service and pre-service teachers are collecting evidence of their lesson plans, instruction, and assessments. Furthermore, edTPA provides the space for teachers to intentionally reflect on their planning, instruction, and assessment decisions and practices. Currently, little empirical research has been conducted to investigate the effects of developing the edTPA teaching portfolio on teachers' reflection, specifically their confidence of competence regarding to the edTPA constructs of planning, instruction, and assessment.

There is little empirical evidence to indicate the effects of successfully developing a teaching portfolio for teachers situated within a state in which their performance on the teaching portfolio is tied to licensure. It is of utmost importance for language educator to discover, signify, and analyze research concerned with language learning and teaching in order to develop and employ effective methods to promote students' language achievement. As Partovi and Tafazoli (2016) pointed out, EFL teachers' professional experience is related to many features including self-regulation, resilience, previous teaching. Reflective teaching is one of such variables.

The problem of this study can be formulated in terms of the following research questions:

1. To what extent does developing the EDTPA teaching e-portfolio affect in-service and pre-service teachers' self-reflection in teacher preparation program in Iranian EFL context?

2. Is there any significant difference between the developing educative teacher performance assessment teaching e-portfolio of EFL teachers' self-reflection in the in-service and pre-service teachers?

3. How do in-service and pre-service teachers perceive their experiences after completing the EDTPA teaching e-portfolio?

Methodology

It was assumed at the outset of this study that developing an edTPA teaching portfolio would enhance pre- and in-service teachers' self-reflection in a teacher preparation program in the Iranian EFL context. To investigate this assumption, the researchers agreed on a mixed method study which allowed the participants to write their own reflections upon a semi-structured interview, various issues pertaining to their teaching, learning, students, etc. Furthermore, in qualitative phase, data was gathered to elicit the respondents' assumptions and allowed them to express their beliefs and assumptions underlying the best teaching practice (Farrah, 2019). The research employed a mixed methods sequential explanatory design. A sequential explanatory design is one that allows the researcher to collect quantitative data over a period of time, along a continuum, with a follow-up collection of qualitative data.

Participants

The sample in this study consisted of 100 EFL pre-service and in-service teachers in the quantitative phase, who were selected into two groups of 50. Six active teachers from the overall sample volunteered for the qualitative data collection. They were interviewed about their reflection on the designed e-portfolio for one semester. They were aged 23-35, both male and female, from teacher preparation programs in different cities in Iran, and with an English educational background. All participants were selected non-randomly based on availability sampling (Farhady, 1995), that is, those

learners willing to participate in the study were selected. They developed an edTPA teaching e-portfolio during their student-teaching experiences on teachers' self-reflection, in a teacher preparation program in the Iranian EFL context. The participants' first language was Persian.

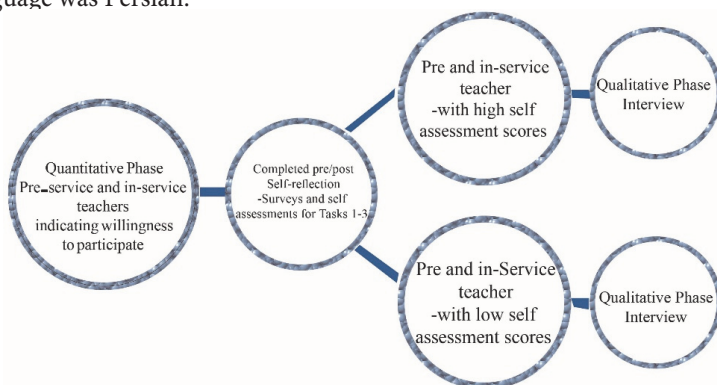


Figure 2. Population and Sampling

Instruments

Self-Reflection Survey: The English Language Teaching Reflective Inventory (ELTRI), a reflective teaching questionnaire consisting of 42 items, developed by Akbari, Behzadpoor, Davvand (2010), with six-component models of second language (L2) teacher reflection, such as practical, cognitive, meta-cognitive, affective, critical and moral reflection, was used to measure the participants' degree of reflectivity. The aim of the Self-reflection Survey was to investigate whether the dependent variable, pre-service and in-service teachers' self-reflection, changed over time after developing the edTPA teaching portfolio. Time was identified as the independent variable, and the edTPA teaching portfolio was identified as the intervention that was developed over time. The researchers used it to see how reflective those EFL teachers were before the project commenced. It was one of the most fundamental instruments used to identify the level of reflection that participants had before using e-portfolios. Hence, it helped to determine if the teachers' reflection was enhanced through using e-portfolios (Al-Qutaiti, 2011; El-Okda, 2009).

Self-assessment. Pre-service teachers used 15 edTPA rubrics to self-assess their planning (teachers learn and know about the students and institution's community), instruction (participants provide evidence that shows their ability to actively engage students in learning academic content or skills), and assessment (they analyze student learning by summarizing the results of the planned assessments and describing patterns of learning) by completing three edTPA tasks which represented 5 levels of unsatisfactory, emerging, satisfactory, accomplished, and highly accomplished for a beginning teacher (Stanford Center for Assessment, Learning and Equity, 2020). It provides a comprehensive framework for assessing reflection in EFL student teachers' e-portfolios. This may be due to the rarity of real attempts to prescribe good frameworks for assessing teachers' reflections in general and the EFL teachers' reflections in particular.

Semi-structured Interview. The semi-structured interview questions were developed as a valuable instrument in the qualitative phase for follow-up questions with pre-service and in-service teachers to determine if the experience for developing edTPA as a teaching

e-portfolio affected their self-reflection (Ahmad, 2017). The interview process involved two stages: pre-interview, and post-interview stage. Before the start of the interview session, the researcher decided on the participants for a pilot of the test interview session and the interview structure to be used. This pilot test was carried out to validate the semi-structured interviews that would be used later when conducting the actual interview research. There is a limitation in this pilot test which involved a small number of participants to ensure that the research data collected was not saturated. Despite this, the study satisfied the requirement for validity and reliability in the qualitative method as it followed sequentially the pre-interview, during and post-interview protocol mentioned. The semi-structured interview questions were:

1. Explain your experiences when developing the edTPA teaching portfolio.
2. Talk about your experiences with planning, instruction, and assessment.
3. Reflect on your self-assessment.
4. Follow-up Questionnaire, to determine students' views, feedback and reactions to the reflective practices of their teachers in English classes Akbari, et al (2010).

Data Gathering and Procedure

The researchers applied the mixed method research design together with statistical analysis. In the qualitative phase the researchers described the experiences and teaching ideas of participants in genuine teaching accounts and conditions, as they voluntarily demonstrated their thoughts and ideas on their e-portfolios. Since the participants had e-portfolio accounts, the researchers arranged two groups on Skype. One for pre-service and in-service teachers who wanted to participate in quantitative research and the other for six participants in qualitative group for online interviews. The researchers explained how to use this program.

At first, teachers were given the opportunity to participate in the study by completing the online questionnaire to see their initial reflection before the commencement of the research. This was the quantitative phase of data collection. To understand the participant's reflection and experiences, the researchers gathered the EFL teachers' data by asking them to develop e-portfolios by doing three edTPA tasks throughout the study period, and then answer the interview questions posted on their e-portfolios at the end of the study. Throughout the development of the edTPA teaching e-portfolio, the pre- and in-service teachers self-assessed their edTPA tasks, using the official edTPA rubrics, after completing each edTPA task. Participants completed the Self-Reflection questionnaire at the end of research to determine their improvement. They completed the edTPA teaching portfolio's Task 1 commentary for planning, followed by the second task for instruction, and, in the third and last step, they completed edTPA teaching portfolio's commentary for assessment using the EDTPA official rubrics. After this stage, they submitted their edTPA teaching e-portfolios for official scoring. The researchers analyzed pre- and in-service teachers' responses to determine if there was a change in teachers' self-reflection and whether there was significant between pre- and in-service teachers (pre- to post-).

The researchers allowed participants a semester to complete the three tasks. They could see what was done throughout the study period as they had access to all participants' work. In the qualitative research the data was analyzed by thematic analysis. Thematic analysis is widely used in qualitative analytic method and is recognized for its flexibility (Farrah, 2019).

The levels of reflection on the challenges were checked during the semester. Six EFL teachers volunteered to participate in the interview. They reflected on their ideas for their teaching environment such as teaching techniques, methods, ideas, assessment, critical

incidents and the students. The researchers used the edTPA tasks rubric for assessing teaching diaries (Stanford Center for Assessment, Learning and Equity, 2020) in order to assess and analyze the participants' work in terms of how reflective they were.

Results

The quality of the sets of scores was checked further before choosing the appropriate statistical techniques. This was necessary since if the assumptions on the basis of which statistical models were built were not met, the application of statistical formulae might have proved misleading.

Nevertheless, the application of parametric formulae was subject to several conditions, the most important of which was normality of the data. Consequently, normality of the results of the pre- and post-test of pre- and in-service teachers' self-reflection was subjected to both Kolmogorov-Smirnov and Shapiro-Wilk tests before verifying the hypotheses proposed earlier. As the findings of normality of the data indicate, the sets of scores representing results of the pre-test and post-test of pre- and in-service teachers' self-reflection were not normally distributed because the respective asymptotic two-tailed levels of significance are larger than the standard .05 level. Thus, nonparametric formulae were employed in the analyses involving the results of the pre-test and post-test.

Table 1 shows an increase in the teachers' self-reflection since the mean of the posttest of two groups are slightly higher than that of the pretest. However, significance of this differences is to be statistically tested.

Table 1. Descriptive statistics of pretest and posttest of pre-service and in-service teachers' self-reflection

	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Minimum</i>	<i>Maximum</i>
In-pre service Pretest	100	64.6500	8.87440	36.00	81.00
In-pre service posttest	100	1.5000	.50252	1.00	2.00

In order to answer the research question "To what extent does developing the edTPA affect pre- and in-service teachers' self-reflection in teacher preparation program in the Iranian EFL context?" and "Is there any significant difference between the developing educative teacher performance assessment of EFL teachers' self-reflection in the in-service and pre-service teachers?" the results of the reflectivity of teachers for pretest and posttest were compared. Consequently, the significance of the difference between the pre-test and post-test of two groups were checked with a Mann-Whitney test. The results are presented in table 2.

Table 2. Mann-Whitney test of pretest and posttest pre-service and in-service teachers' self-reflection

		<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
Pretest	Negative Ranks	50 ^a	49.03	2451.50
	Positive Ranks	0 ^b	51.97	2598.50
	Ties	0 ^c		
Posttest	Total	100		
	Negative Ranks	50	48.74	2437.00
	Positive Ranks	0	52.26	1613.00
	Ties	0		
	Total	100		

It is evident from Table 3 that the asymptotic two-sided level of significance of the related -samples Mann -Whitney test is smaller than the standard level of significance ($\alpha = .05$). This proves that the improvement observed in the performance of the teachers based on teaching portfolio on their reflection in teaching was statistically significant. Thus, developing edTPA had significant effects on pre-service teachers' self-reflection in teacher preparation program in the Iranian EFL context.

To answer the research question "How do pre-service and in-service teachers perceive their experience after completing the edTPA teaching e-portfolio on their self-reflection," an interview was conducted with six teachers in order to achieve detailed and specific views and opinions in terms of EFL teacher's reflective approach and experiences based on edTPA teaching e-portfolio tasks (planning, instruction, and assessment). The researchers analyzed the data gathered from online interviews.

In summary, a framework of assessing reflection achieving tasks is described and then the participants' e-portfolios are assessed accordingly. Moreover, the data gathered from the survey was analyzed quantitatively, to complement the qualitative dominating evidence. To give the whole picture of the six participants' experiences of the reflection enhancing tasks and e-portfolios the researchers supplied a descriptive qualitative approach.

The interview was open ended, conducted in a conversational style, and completed in one session. The participants were offered as much time as necessary to respond each question. All interviews were recorded and the interview time was expected to vary from 15 to 20 minutes. To analyze the qualitative data gained through interviews, all audio-recordings were transcribed and the answers were classified regarding three tasks of teaching portfolio and reflective constructs as practical factor, cognitive factor, meta-cognitive factor, and affective factor (Akbari, et al., 2010).

The results of interview analysis showed that, at first, teachers thought it was significant for their program to be offered an edTPA support course in the term prior to student teaching, to set them up for success. In their reflection they came to an understanding that it was not a troublesome process. They described their experiences with developing the edTPA teaching portfolio as having some challenges, too. In some ways, it made them think more and sometimes it stressed them out more than it helped. In addition, they agreed that the process of developing edTPA influenced their reflective practices. Furthermore, they believed that it is really useful for reflection on their teaching in regard to the reason for doing this, how do we help our students, and what exactly are we doing and why? Reflective practice also could support them in developing strategies and learning tasks which were useful for student's achievement and needs.

Pre-service teachers also referred to this process as being effective especially in terms of reflection by clarifying that it really made them think about "the reason that we teach in the way we teach" (Darling-Hammond, 2010). Another emerging result suggested that pre-service teachers perceived their relationships with cooperating teachers and students as they developed their edTPA teaching portfolio. They developed creative teaching strategies and learning tasks while considering their students' needs, interests, and developmental levels related to the affective aspect of reflection. Furthermore, the pre- to post- self-reflection results showed an increase in the teachers' confidence related to planning for students. Furthermore, task 1 (planning) helped them to know their students' prior knowledge and interest, and so help their students become engaged in the tasks that they planned.

As all pre-service teachers wanted to improve their teaching quality and achieve their teaching knowledge, they used different tasks and tools to reflect on their performances. In line with the practical aspect of reflection, pre-service teachers cooperated with their

colleagues to share their experiences of providing feedback and their expectations in developing teaching portfolios. Also, they observed their colleagues' classes for efficient practices and wrote up their experiences after every session. As a result, they reflected on their own action.

During developing edTPA teaching portfolio tasks, pre-service teachers also participated in different teaching workshops offered by their colleagues, and they shared some theoretical books related to teaching and learning issues that they declared to be effective and useful. This demonstrated the useful cognitive aspects of reflection.

In the instruction task, more than half of the teachers talked about their goals and the outcomes of their teaching by emphasizing their weak and strong points of teaching, and by reflecting on their behavior and attitudes throughout the teaching course. This could affect their teaching and learning strategies to improve teaching objectives and make them reflective thinkers. They became aware and eager to learn from their mistakes and prior experiences, which is what the meta-cognitive aspect of reflection strives for. All the reflection factors and edTPA teaching e-portfolio tasks of planning, instruction, and assessment are related to each other since they can increase reflectivity of pre-service teachers.

The findings of this study were consistent with previous research results. Some researchers in their studies mentioned that the participants see the reflection as what they did in their classroom without paying attention to the reasons, beliefs or how to apply reflective practice correctly (Cowan & Peacock, 2017; Farrell, 2018). Farrell and Yang (2019) view reflection as self-awareness rather than correcting mistakes. The results showed that teachers attained high level of reflections on their teaching. Also, motivating teachers through developing e-portfolios is really significant in helping them to become more reflective teachers. Some researchers suggested scaffolding reflection by using reflection framework for teachers to improve their teaching process (Hegarty, 2011; Hall, 2017).

Developing an e-portfolio by completing the three edTPA tasks is useful for EFL teachers to become more autonomous and self-directed and in the area of self-reflective learning and teaching in their practices and decisions. Enhancing self-reflection also generate learning. This study is an example about edTPA and developing e-portfolio and reflection for teachers and their professional improvement (Cowan & Peacock, 2017). Furthermore, e-portfolios advance engagement and motivation because the teachers are free to choose the artifacts and the timing of their reflection (Tosh, et al, 2005). One of the key points of this study is that the readers can find the descriptive reflection and edTPA's rubric, and learn how to implement it to reach a high level of self-reflection on their practices.

Researchers in many countries have begun to examine the usefulness and effectiveness of edTPAs for teacher performance assessment. They found correlation between candidate scores on the edTPA and their potential to enter the teaching profession (Goldhaber, Liddle & Theobald, 2013). They defined that the potential of edTPA to impact the quality of teaching of all candidates "likely depends on the ability of [teacher educator preparators] to create feedback loops that allow candidate performance on the edTPA to influence the training they provide" (p. 30).

Teacher performance assessments for practicing teachers, such as National Board certification, have been shown to improve formative assessment practices for certification candidates (Sato, Wei, & Darling-Hammond, 2008). In addition to experienced teacher performance assessment having a positive impact on teacher practices, teacher performance assessments for pre-service teachers such as PACT have been shown to positively impact growth in skills such as using assessment to modify lessons and

attending to content standards or outcomes (Whittaker & Nelson, 2013). Research on perceptions of the edTPA also indicates that teachers improved their practice in the areas of reflection, planning, and assessment (Bacon & Blachman, 2017).

Conclusion

In summary, the results of this study indicate that teacher educators can raise the reflectivity of teachers by developing edTPA teaching e-portfolio as a valuable tool for improving teaching practices, student learning and process of teaching. The result also provides insights that the Ministry of Education in Iran should apply using e-portfolios for its teachers and supervisors in order to access to each other's thoughts and practices easier for better teaching. Moreover, the use of e-portfolios for enhancing teachers' reflectivity should be seen as relevant as an assessment system in higher education, institutions, and learning environment as well as to collect experiences and reflect on teachers which leads to better teaching and learning.

The findings also suggest that teachers placed with cooperating teachers who have received edTPA e-portfolios can benefit from increased cooperating teacher knowledge about the edTPA tasks of planning, assessment, and instruction. Additionally, the findings have implications for EFL teachers in Iran. The results from this study will benefit teacher educators, stakeholders, and pre-service teachers. Teacher educators must collect evidence from pre-service teachers indicating their readiness to teach prior to being recommended for teacher licensure and teaching process (e.g., artifacts and reflections within the edTPA teaching portfolio) (Darling-Hammond, 2010). Teacher preparation programs across the country are faced with increasing pressure to adopt rigorous and high stakes performance-based assessments that provide data-based evidence that their teachers are prepared to instruct upon program completion. One of the limitations of this study was selecting teachers who participated in language institutes in Iran, not university teachers. The research was done in one semester of education, and however, with careful selecting participants, there may be a conflict with their personality, styles of teaching and so on.

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