

Teacher Assessment Identity in Motion: The Representations in E-Portfolios of Novice and Experienced EFL Teachers

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Abstract

Teacher assessment identity (TAI) is a pivotal segment of teachers' professional identity and practice that has recently gained momentum in second/foreign language research. However, its developmental trajectories in light of digital technologies over time have remained uncharted to date. To fill this gap, this study intended to unpack the dynamics of EFL teachers' assessment identity through e-portfolios uploaded on a website. In doing so, 22 novice and experienced Iranian EFL teachers were requested to prepare a series of e-portfolios for a period of two months across three phases. Furthermore, to capture the participants' perceptions about TAI and its dynamism in light of e-folios, a semi-structured interview was held with 10 EFL teachers. The results of independent median tests demonstrated a significant difference between novice and experienced EFL teachers' assessment identity at $p < .05$, with the experienced group being more affected by the e-portfolios. Based on Friedman's tests, significant improvements in novice teachers' assessment identity were found from phase 1 to phase 2, and phase 2 to phase 3, owing to the use of e-portfolios. However, the experienced participants did not show a significant improvement from phase 1 to phase 2, while in phase 3, a significant improvement and jump were observed. Moreover, the thematic analysis of the interviews indicated that both groups concurred that e-portfolio could contribute to TAI development given its capability to inspire reflection on assessment practices. The study presents implications for EFL teachers, teacher educators, and L2 researchers regarding the dynamism of TAI in light of e-portfolios.

Keywords: EFL teacher, E-portfolio, Experienced teacher, Novice teacher, Teacher assessment identity

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INTRODUCTION

Teacher identity has been the focal point of a vast body of research in second/foreign language education in the past decades (Derakhshan & Nazari, 2022a; Richards, 2021). It is an inseparable segment of teaching, and what it means to be a teacher (Beijaard, Meijer, & Verloop, 2004). The way a teacher perceives him/herself and what others think about and evaluate his/her abilities form the basis of teacher identity (Beijaard, 2019). This perceived image affects one's pedagogical beliefs, practices, attitudes, and cognition (Akkerman & Meijer, 2011; Huang, Law, & Lee, 2019; Schutz, Nichols, & Schwenke, 2018). As corroborated by post-structural perspectives, teacher identity is dynamic, negotiated, interaction-based, and multiple (Beauchamp & Thomas, 2009; Derakhshan & Nazari, 2022b;). Given these complications, one's identity undergoes fluctuations and modifications in relation to several factors such as demographics (age, gender, and teaching experience level), context, social status, and emotions (Barger, 2022; Kocabaş-Gedik & Ortaçtepe Hart, 2021).

Nevertheless, the identity that English as a foreign language (EFL) teachers craft in assessment domains has been left uncharted to date. If testing and teaching are two sides of the same coin, why not perceiving and allocating a separate position to assess identity in L2 education? The current literature has mostly focused on the stages of teacher identity development and professional identity (Akkerman & Meijer, 2011; Beijaard et al., 2004), and no room is left to assessment identity. This is in a sharp contrast with the idea that assessment itself is a pivotal aspect of one's professional identity (Wood, 2016).

It is axiomatic that EFL teachers may construct a different identity for themselves in the context of assessment, accountability, and high-stakes examinations. The way test-takers and principals perceive an EFL teacher regarding his/her testing capacities leads to assessment identity (Adie, 2013). Just as different pedagogical behaviors and practices shape one's professional/teaching identity, assessment beliefs and practices generate

assessment identity among EFL teachers. However, the concept of teacher assessment identity (TAI) remained under the shadow of professional identity until two breakthrough studies in Australia were published by Adie (2013) and Looney, Cumming, van Der Kleij, and Harris (2017), who elucidated the term and allocated a separate identity to it. They pinpointed that TAI is a multi-dimensional construct that goes beyond assessment literacy (AL) and must be studied in its own rights.

By definition, TAI pertains to teachers' assessment knowledge, skills, practices, confidence, and attitudes as assessors (Adie, 2013; Looney et al., 2017). Having the conceptualizations been clarified, some scholars in Iran (e.g., Estaji & Ghiasvand, 2021; Jan-nesar, Khodabakhshzadeh, Motallebzadeh, & Khajavy, 2021) began unpacking the underlying components of TAI and offered two scales to measure the construct. Although these four studies are promising enough, they have not depicted the dynamism and developmental trajectories of TAI. They have mostly focused on the theoretical underpinnings of assessment identity and few constituent elements of the construct. This is in conflict with their contentions that TAI is a composite of several assessment dimensions beyond AL that is affected by teaching experience. These shortcomings provided the motivation for running the present study to demystify the developmental paths of TAI in relation to the teaching experience level and contextual shift (i.e., the cyberspace) as two influential factors in (re)crafting teachers' identity (Trent, 2017; Yazan, 2018).

More particularly, this study examined how digital technologies (e.g., e-portfolios) can shift novice and experienced EFL teachers' understanding of assessment and assessment identity. E-portfolios, as collections of one's work over a period of time, have been scientifically approved to transform teacher identity (Fu, Hopper, Sanford, & Monk, 2022; Zhou, Chye, Koh, & Liu, 2013). Nonetheless, the way they can facilitate the development and modification of TAI in EFL contexts has remained under-researched. To cast light on the dynamism of TAI under the influence of e-folios prepared on the cyberspace, this study examined the difference between novice and

experienced Iranian EFL teachers' assessment identity after using e-portfolio.

LITERATURE REVIEW

The Concept and Dimensions of Teacher Assessment Identity

In language testing and assessment, two concepts of assessment literacy (AL) and conceptions of assessment (COA) have concealed assessment identity as a separate construct (Looney et al., 2017). AL pertains to the teachers' assessment knowledge and skills, whereas COA points to the teachers' overall mental structures that affect their assessment beliefs and practices (Brookhart, 2011). Since identity steps beyond one's skills and mental structures, a new term was introduced by Adie (2013) and Looney et al. (2017), which covers the complexity and dynamism of a teacher's identity in relation to assessment. The concept of TAI is described as a teacher's perceptions of him/herself as an assessor, and the way others (e.g., students, colleagues, parents) perceive him/her as per assessment practices (Adie, 2013). Additionally, Looney et al. (2017) pinpointed that TAI refers to one's assessment knowledge, feeling, and roles as well as his/her confidence in conducting assessment. They injected the concepts of "self-efficacy" and "dispositions" toward assessment into the explanation of TAI. Self-efficacy in assessment domains refers to a teacher's beliefs in his/her capabilities to efficiently implement assessment techniques (Dellinger, Bobbett, Olivier, & Ellett, 2008). However, dispositions in assessment pertain to professional values, obligations, and morals that affect one's assessment practices. The concept is still at initial stages of development, and its conceptualization may improve. However, to date, it is clear that TAI is a multi-dimensional construct, which entails various aspects of assessment.

As mentioned, TAI is a multi-dimensional construct that covers different aspects of teacher identity and L2 assessment. The first attempt to disclose the underlying components/dimensions of TAI was made by

Looney et al. (2017) in Australia. After a substantial analysis of the literature, they introduced five dimensions for TAI including “I know”, “I feel”, “my role”, “I believe”, and “I am confident”. The dimensions, respectively, refer to the teachers’ assessment knowledge, attitude, roles, beliefs, and degree of self-confidence in applying assessment. In a more recent study, Jan-nesar et al. (2021) maintained that TAI includes the three dimensions of “assessment literacy”, “assessment dispositions”, and “contextual factors”. Their study regarded AL as a component of TAI, while the literature strongly posits that TAI goes beyond AL. Moreover, these two studies rarely (if any) attend to the practical side of assessment that influences one’s identity. To solve these problems, in another study in Iran, Estaji and Ghiasvand (2021) validated a scale on TAI that included 12 components, namely assessment “knowledge”, “beliefs”, “practices”, “use assurance”, “consistency and consequence”, “feedback”, “rubric/criteria”, “attitudes”, “skills and confidence”, “roles”, “grading/scoring”, and “question-types”. What is common among the growing studies on TAI is that it is a complex and multi-layered term.

E-Portfolio and Teacher Identity

Given the narrative aspect of e-portfolio that permits one to self-construct his/her identity to be perceived, transferred, and refined over time, several studies have been done on the association between e-portfolio and identity in academia (McAlpine, 2005; Mgarbi, Chkouri, & Tahiri, 2021). With e-folios, teachers can document their journey in becoming a teacher by selecting, sharing, and reflecting on artifacts (Lambert, Depaepe, Lambert, & Anderson, 2007; Strudler & Wetzel, 2005). They can both display their best work as professionals and reveal their knowledge and skills in using technology (Heath, 2003). Since e-portfolios are developed as personal stories, they can house self-constructed identities (Granberg, 2010; McAlpine, 2005). Research shows that e-folios and teacher identity are interconnected through a process of selecting, collecting, reflecting and

evaluating one's work (Bennett, Rowley, Dunbar-Hall, Hitchcock, & Blom, 2016; Lorenzo & Ittelson, 2005). In this regard, Zhou et al. (2013) and Younghusband (2021) argued that through e-portfolios, teachers' identity as professionals and their understanding of standards in educational programs develop over time. However, the potentials of these instruments in showcasing assessment identity in L2 contexts have been widely overlooked to date. Since teacher identity is constantly in a state of flux, using qualitative tools like e-portfolios and narratives are preferred over one-shot instruments.

Previous Studies

Based on the post-structural conceptualization of teacher identity, identity is a dynamic construct that develops over time and across contextual shifts (Beijaard, 2019). In such perspectives, teachers are believed to take multiple I-positions (or identities) depending on the context where they work (Akkerman & Meijer, 2011; Kayi-Aydar, 2019). Now teacher identity is a situated practice and is shifting toward online contexts provided by digital technologies (e.g., e-portfolios, weblogs) can modify the content of one's identity (Robson, 2018). Not being an exception, TAI has been proven to represent itself differently in online settings and via digital affordances. For instance, in a breakthrough research, Adie (2013) inspected 50 middle school teachers' assessment identity in Queensland using an online moderation course. The results of his study demonstrated that TAI is multi-dimensional and develops through participation in online moderation. This inspired other studies to disclose the underlying components of TAI. In this respect, Looney et al. (2017) laid the first foundation stones of TAI by proposing five dimensions explicated earlier. Afterward, Iranian researchers drew on these two studies and developed and validated two questionnaires on TAI in EFL contexts (Estaji & Ghasvand, 2021; Jan-nesar et al., 2021). In a more recent study, Fu et al. (2022), examined the potential of e-portfolios in shaping teachers' assessment identity in British Columbia and

identified that these reflective tools facilitate TAI development and modify one's understanding of assessment.

Despite these insightful studies, TAI research is yet at its nascent stages, and more empirical research is required to reveal its dynamics in L2 education, especially through digital technologies. Moreover, the role of teaching experience as a crucial factor in teacher identity (re)construction (Beijaard & Meijer, 2017) is unknown in TAI development/transformation.

PURPOSE OF THE STUDY

As noted earlier, the developmental paths of novice and experienced EFL teachers' assessment identity under the influence of technologies (e.g., e-portfolios) is still an under-researched territory. Inspired by this void, the present study investigated the developmental paths of TAI among novice and experienced Iranian EFL teachers in light of a series of e-portfolios. More specifically, it aimed to respond to the following research questions.

1. To what extent, if any, is there a statistically significant difference between novice and experienced Iranian EFL teachers' assessment identity after using e-portfolio?
2. How does the use of e-portfolio contribute to the development of novice and experienced Iranian EFL teachers' assessment identity?

METHOD

Participants

In this study, 22 Iranian EFL teachers with various teaching experiences and educational qualifications were recruited (Table 1). They were selected through convenience sampling, including both genders (male = 32%, female = 68%). Concerning their university major, they all majored in Applied Linguistics. Moreover, they were teaching English at different language institutes in Tehran, Iran with their age ranging from 26 to 46 years old (*M*

= 31.86, $SD = 5.81$). Based on their teaching experiences, the participants were divided into novice ($n = 11$) and experienced ($n = 11$) groups. Using Gotbonton's (2008) proposition, those participants with teaching experiences of less than five years were considered as novice, while those with and above five years of experience were considered experienced. Furthermore, in the interview phase, five novice and five experienced EFL teachers were invited to attend an audio-recorded, semi-structured interview regarding their perceptions of TAI development in light of using e-portfolios.

Table 1: EFL Teachers' Demographic Information

Demographics	No. (%)
Age	
26-30	13 (59%)
31-36	4 (18%)
37-41	3 (14%)
42-46	2 (9%)
Gender	
Male	7 (32%)
Female	15 (68%)
Educational Degree	
BA	1 (5%)
MA	11 (50%)
PhD	10 (45%)
Major	
Applied Linguistics	22 (100%)

It is noteworthy that the researchers ensured the participants that they were free to leave the study at any time for any reason. The participants' consent was also obtained by a form delivered online. Likewise, the ethical considerations of confidentiality and privacy of information, identity, and responses were observed in this study.

Instruments

E-Portfolios

To examine their assessment identity motion, the teacher participants were asked to provide six e-portfolios in three phases representing their identity and assessment practices for two months. In their e-folios, they had to reflect on assessment beliefs and practices as well as different components of TAI. To provide a structure for e-folios, the researchers designed several tasks to be completed and reflected upon by the participants. The reason behind using e-portfolio was that the EFL teachers could monitor the developmental process of their assessment identity construction and reconstruction with greater ease.

Semi-structured Interviews

After collecting and analyzing the e-portfolios, to have a triangulated approach, the researchers ran an audio-recorded semi-structured interview with 10 EFL teachers (five novice and, five experienced) to unpack their opinions about assessment identity and how the use of e-portfolio contributed to its development. The interviews were conducted during non-instructional times, each lasting about 10 minutes. The interviewees were chosen based on their e-portfolios, teaching experience, and inclination for further cooperation. The researchers developed the interview questions and asked three experts with Ph.D. degrees in Applied Linguistics to scrutinize the appropriateness of the questions and their content validity. To ensure item clarity, the experts rated the questions on a four-point Likert scale ranging from 1 (*not clear*) to 4 (*very clear*). Moreover, item relevance was checked by a scale ranging from 1 (*not relevant*) to 4 (*very relevant*). Then the content validity index (CVI) was calculated, which demonstrated a high overall degree of agreement over the content of the interview questions (0.97). Although the questions were pre-specified, the respondents had freedom to explain their responses and bring other relevant points.

Data Collection Procedure

In order to glean the required data, the participants were asked to prepare and upload a series of e-portfolios of their assessment beliefs and practices on a researcher-made weblog for a period of two months (Figure 1). The weblog was developed through “*WordPress*” platform and before initiating the investigation, the researchers created individual accounts for the participants and sent them to their emails. Moreover, an instruction pack was provided to help the teachers work with the weblog and upload their e-portfolios easily.

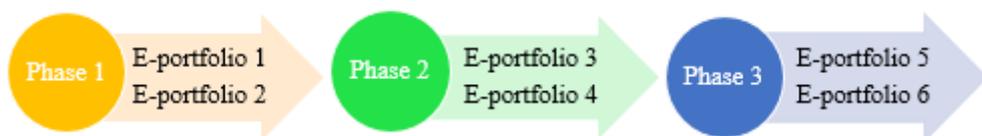


Figure 1: E-portfolio Data Collection Phases

More specifically, the participants were asked to prepare six e-portfolios in three phases, each including two, at the beginning, in the middle, and at the end of the two months period. The e-portfolios were prepared based on the tasks and activities representing TAI dimensions. The collected e-folios were then analyzed quantitatively using a five-point rating scale with 1, representing “poor” and 5, representing “excellent”. In the last phase of the study, to enrich the data, the researchers ran a semi-structured interview with 10 teachers to further examine their assessment perceptions, practices, and manifestations of assessment identity in light of e-portfolios. The interview data were then transcribed via Atlas.ti software (v. 9). After the verbatim transcription of all the data, the researchers, once over, listened to the audio files of the interviews to ensure the accuracy of the transcriptions.

After gathering and analyzing the data, the principles of credibility and dependability had to be ensured (Lincoln & Guba, 1985). To this end, the extracted codes/themes of the interviews and e-portfolios were member

checked by the participants. Furthermore, an experienced L2 researcher, who had done research on assessment and identity, cross-checked 20 percent of the data collected by e-portfolios and interviews, which respectively ended in inter-coder reliability indices of 0.95 and 0.97 as obtained by Cohen's Kappa coefficient. Finally, another expert audit trialed the whole data analysis to ensure the confirmability of the findings. Minor discrepancies appeared in this phase, which were then resolved in an online meeting held on Skype.

Data Analysis

The data analysis was done both quantitatively and qualitatively. Concerning the first research question, independent samples median tests and Friedman's tests were used to analyze the data. Moreover, a scoring rubric was designed by the researchers to systematically evaluate the representations of TAI in e-portfolios in tune with the components of TAI. In the second research question, content and thematic analyses were utilized following the six phases proposed by Braun and Clarke (2006). The analysis started with data familiarization through (re)reading the transcripts. Afterward, the transcripts were scrutinized to generate initial codes. Then the codes were organized into potential themes. Next the codes/themes were reviewed to produce a thematic map of the analysis. Lastly, the extracted codes/themes were refined, defined, and labelled to produce the final results. It is also worth noting that the interview data were analyzed via MAXQDA software (v. 2020) based on Strauss and Corbin's (1990) model of data codification (i.e., open coding, axial coding, and selective coding). First, the researchers inspected the data and generated open codes. Then in axial coding, the themes that emerged in the open codes were compared and mixed to produce larger codes. In the end, the extracted themes came under larger categories in the "selective coding" stage (Creswell, 2008).

RESULTS

The difference in the Novice and Experienced Teachers' Assessment Identity

To answer the first question, which concerned the extent to which there was a statistically significant difference between novice and experienced Iranian EFL teachers' assessment identity after using e-portfolios, the participants' performances were rated on a scale of 1 (poor) to 5 (excellent). In what follows, the results of this assessment to each item are compared using series of independent samples Median tests. Tables 2 to 13 provide the description of the participants' evaluation for each item.

Table 2: Description for the Evaluation of Participants' Assessment Identity Affected by E-Portfolio: Assessment Beliefs

		Frequency					Mean	SD
		Poor	Fair	Average	Good	Excellent		
01: The teacher knows the purposes of assessment.	Novice	1	5	3	1	1	2.63	1.12
	Experienced	0	2	5	3	1	3.27	.90
02: The teacher knows when and by whom an assessment should be done.	Novice	1	5	4	1	0	2.45	.82
	Experienced	0	1	3	6	1	3.63	.80
03: The teacher knows the uses of assessment data.	Novice	3	4	3	1	0	2.18	.98
	Experienced	1	2	4	3	1	3.09	1.13
04: The teacher is familiar with factors that must be considered in in assessment.	Novice	4	4	2	1	0	2.00	1.00
	Experienced	0	0	2	7	2	4.00	.63
Average Total	Novice						2.31	.51
	Experienced						3.50	.33

As it is evident from Table 2, for all items of assessment belief, the experienced participants performed better than the novice ones. Table 3 shows the description of the evaluation for assessment knowledge.

Table 3: Description for the Evaluation of Participants' Assessment Identity Affected by E-Portfolio: Assessment Knowledge

		Frequency					Mean	SD
		Poor	Fair	Average	Good	Excellent		
01: The teacher knows the fundamental principles of language testing.	Novice	0	0	5	5	1	3.63	.67
	Experienced	0	0	1	5	5	4.36	.67
02: The teacher can practically ensure reliability and validity indices.	Novice	0	2	2	5	2	3.63	1.02
	Experienced	0	0	3	4	4	4.09	.83
03: The teacher knows test washback, authenticity and interactivensess.	Novice	0	1	3	6	1	3.63	.80
	Experienced	0	0	0	4	7	4.63	.50
04: The teacher knows the stages of test design and development.	Novice	2	2	3	3	1	2.90	1.30
	Experienced	0	0	3	5	3	4.00	.77
05: The teacher knows and is able to distinguish between formative and summative assessment	Novice	0	0	6	5	0	3.45	.52
	Experienced	0	0	0	3	8	4.72	.46
06: The teacher is familiar with different assessment methods.	Novice	0	3	6	1	1	3.00	.89
	Experienced	0	0	0	5	6	4.54	.52
Average Total	Novice						3.37	.60
	Experienced						4.39	.29

The evaluation of participants' assessment knowledge also showed that for all items, the experienced participants outperformed the novice ones. The next component to be examined was assessment practices (Table 4).

Table 4: Description for the Evaluation of Participants' Assessment Identity Affected by E-Portfolio: Assessment Practices

		Frequency					Mean	SD
		Poor	Fair	Average	Good	Excellent		
01: The teacher knows assessment criteria for speaking and writing skills.	Novice	0	2	4	5	0	3.27	.78
	Experienced	0	0	3	3	5	4.18	.87
02: The teacher knows and is able to draw an assessment rubric.	Novice	1	2	2	4	2	3.36	1.28
	Experienced	0	0	0	4	7	4.63	.50
03: The teacher knows the benefits of assessment rubrics.	Novice	0	0	4	3	4	4.00	.89
	Experienced	0	0	1	7	3	4.18	.60
04: The teacher knows and uses self-assessment and peer-assessment techniques.	Novice	0	2	3	4	2	3.54	1.03
	Experienced	0	1	2	3	5	4.09	1.04
05: The teacher uses different assessment methods in the class.	Novice	2	1	2	4	2	3.27	1.42
	Experienced	0	2	1	3	5	4.00	1.18
Average Total	Novice						3.49	.80
	Experienced						4.21	.41

The inspection of the participants' assessment practices scores also shows that in all items, the experienced participants had higher scores. Table 5 shows the description of data for assessment attitude.

Table 5: Description for the Evaluation of Participants' Assessment Identity Affected by E-Portfolio: Assessment Attitude

		Frequency					Mean	SD
		Poor	Fair	Average	Good	Excellent		
01: The teacher has a positive attitude toward integrating assessment and instruction.	Novice	1	1	3	3	3	3.54	1.29
	Experienced	0	0	0	7	4	4.36	.50
02: The teacher has a positive attitude toward alternative assessments.	Novice	1	0	3	4	3	3.72	1.19
	Experienced	0	0	2	5	4	4.18	.75
03: The teacher considers assessment as an integral part of his/her profession.	Novice	1	0	3	5	2	3.63	1.12
	Experienced	0	1	2	6	2	3.81	.87
Average Total	Novice						3.63	1.01
	Experienced						4.12	.30

In the case of assessment attitudes, again, the experienced participant had higher scores compared to the novice ones. Table 6 describes the participants' scores with regard to assessment use assurance.

Table 6: Description for the Evaluation of Participants' Assessment Identity Affected by E-Portfolio: Assessment Use Assurance

		Frequency					Mean	SD
		Poor	Fair	Average	Good	Excellent		
01: The teacher knows assessment use assurance (AUA).	Novice	0	0	1	5	5	4.36	.67
	Experienced	0	0	0	5	6	4.54	.52
02: The teacher shows AUA in his/her assessment.	Novice	0	1	2	4	4	4.00	1.00
	Experienced	0	0	0	2	9	4.81	.40
Average Total	Novice						4.18	.64
	Experienced						4.68	.25

Like all previous components, the assessment use assurance was greater among experienced participants than the novice ones. The next component to be checked was assessment confidence and skills (Table 7).

Table 7: Description of the Evaluation of Participants' Assessment Identity Affected by E-Portfolio: Assessment Confidence and Skills

		Frequency					Mean	SD
		Poor	Fair	Average	Good	Excellent		
01: The teacher can define assessment confidence.	Novice	1	1	4	4	1	3.27	1.10
	Experienced	0	0	1	5	5	4.36	.67
02: The teacher can differentiate assessment confidence and AUA.	Novice	1	1	5	3	1	3.18	1.07
	Experienced	0	0	1	6	4	4.27	.64
03: The teacher is confident about his/her assessment practices.	Novice	0	0	1	6	4	4.27	.64
	Experienced	0	0	0	9	2	4.18	.40
04: The teacher is skillful in designing, administrating, scoring, and interpreting assessment.	Novice	0	3	3	2	3	3.45	1.21
	Experienced	0	0	0	5	6	4.54	.52
Average Total	Novice						3.54	.66
	Experienced						4.34	.39

As reported in Table 7, assessment confidence and skills was no exception and in all items the experienced participants had greater scores. Table 8 shows the description of scores for assessment feedback.

Table 8: Description for the Evaluation of Participants' Assessment Identity Affected by E-Portfolio: Assessment Feedback

		Frequency					Mean	SD
		Poor	Fair	Average	Good	Excellent		
01: The teacher knows assessment feedback and its purposes.	Novice	0	0	3	6	2	3.90	.70
	Experienced	0	1	4	5	1	3.81	.60
02: The teacher uses different assessment feedback for different skills	Novice	0	0	3	7	1	3.54	.82
	Experienced	0	0	0	6	5	4.45	.52
Average Total	Novice						3.72	.64
	Experienced						4.13	.32

For the assessment feedback, the experienced participants' scores were also higher than the novice ones. Table 9 shows the description of the results for assessment rubric/criteria.

Table 9: Description for the Evaluation of Participants' Assessment Identity Affected by E-Portfolio: Assessment Rubric/Criteria

		Frequency					Mean	SD
		Poor	Fair	Average	Good	Excellent		
01: The teacher is able to design a scoring rubric.	Novice	0	0	1	5	5	4.36	.67
	Experienced	0	0	0	5	6	4.54	.52
02: The teacher knows and follows specific criteria in assessing students.	Novice	0	0	1	7	3	4.18	.60
	Experienced	0	0	2	4	5	4.27	.78
Average Total	Novice						4.27	.46
	Experienced						4.40	.37

For the assessment rubric/criteria, still, the experienced participants had higher scores. Table 10 shows the description of evaluation for assessment consistency and consequences.

Table 10: Description for the Evaluation of Participants' Assessment Identity Affected by E-Portfolio: Assessment Consistency and Consequences

		Frequency					Mean	SD
		Poor	Fair	Average	Good	Excellent		
01: The teacher knows assessment consistency and inter/intra-rater reliability.	Novice	0	0	4	4	3	3.90	.83
	Experienced	0	1	1	5	4	4.09	.94
02: The teacher is familiar with factors influencing assessment consistency.	Novice	0	2	3	3	3	3.63	1.12
	Experienced	0	0	3	4	4	4.09	.83
03: The teacher knows the consequences of language tests on different stakeholders.	Novice	0	0	1	5	5	4.36	.67
	Experienced	0	0	0	3	8	4.72	.46
Average Total	Novice						3.96	.54
	Experienced						4.30	.31

Table 10 shows that the experienced teachers had higher scores compared to the novice ones with regard to assessment consistency and consequences. Table 11 shows the results for assessment grading.

Table 11: Description for the Evaluation of Participants' Assessment Identity Affected by E-Portfolio: Assessment Grading

		Frequency					Mean	SD
		Poor	Fair	Average	Good	Excellent		
01: The teacher knows the difference between grading and feedback.	Novice	0	0	2	6	3	4.09	.70
	Experienced	0	0	0	5	6	4.54	.52
02: The teacher knows and uses different scoring systems (holistic, analytic, and primary trait).	Novice	0	0	0	5	6	4.54	.52
	Experienced	0	0	0	4	7	4.63	.50
Average Total	Novice						4.31	.51
	Experienced						4.59	.20

Table 11 shows that experienced teachers had higher scores in assessment

grading as well. Table 12 describes the participants' scores with regard to assessment roles.

Table 12: Description for the Evaluation of Participants' Assessment Identity Affected by E-Portfolio: Assessment Roles

		Frequency					Mean	SD
		Poor	Fair	Average	Good	Excellent		
01: The teacher knows different roles that L2 teachers must take in assessment.	Novice	0	0	1	5	5	4.36	.67
	Experienced	0	0	1	1	9	4.72	.64
02: The teacher knows what roles to take in different assessment practices.	Novice	0	0	0	4	7	4.63	.50
	Experienced	0	0	0	2	9	4.81	.40
Average Total	Novice						4.50	.50
	Experienced						4.77	.34

As shown in Table 12, the experienced teachers' scores were higher than the novice ones. Finally, Table 13 shows the participants' scores with regard to question types.

Table 13: Description for the Evaluation of Participants' Assessment Identity Affected by E-Portfolio: Question Types

		Frequency					Mean	SD
		Poor	Fair	Average	Good	Excellent		
01: The teacher knows different question-types, their benefits, and problems.	Novice	0	0	0	5	6	4.54	.52
	Experienced	0	0	0	4	7	4.63	.50
02: The teacher knows and follows the guidelines in designing different question-types for different language skills/sub-skills.	Novice	0	0	1	5	5	4.36	.67
	Experienced	0	0	2	2	7	4.45	.82
Average Total	Novice						4.45	.35
	Experienced						4.54	.61

As shown in Table 13, the experienced participants also had higher scores in question types. Throughout the inspection of assessment identity components, this was the case for all items. To examine if these differences were significant, a series of independent samples median test were run. The reason the researchers opted for using this test was the characteristics of the rating scale and the distribution of scores (usually not normally distributed, as seen in Tables 2 to 13). Table 14 shows the results.

Table 14: Independent Median Tests on the Component of Assessment Identity Affected by E-Portfolio: Comparing Experienced and Novice Participants

	Total N	Median	Test Statistic	df	Asymptotic Sig. (2-sided test)	Fisher Exact Sig.(2- sided test)
Beliefs	22	3.12	14.72 ^a	1	.00	.00
Knowledge	22	4.00	11.73 ^a	1	.00	.00
Practices	22	4.10	4.54 ^a	1	.03	.08
Attitudes	22	4.00	.18 ^{a,b}	1	.66	1.00
Use Assurance	22	4.50	2.32 ^{a,b}	1	.12	.31
Confidence & Skills	22	4.00	11.73 ^a	1	.00	.00
Feedback	22	4.00	.91 ^{a,b}	1	.33	.63
Rubric/Criteria	22	4.50	.38 ^{a,b}	1	.53	1.00
Consistency & Consequence	22	4.16	4.54 ^a	1	.03	.08
Grading	22	4.50	.00 ^{a,b}	1	1.00	1.00
Roles	22	4.75	1.63 ^a	1	.20	.39
Question Types	22	4.50	3.14 ^{a,b}	1	.07	.18

a. More than 20% of the cells have expected values less than five.

b. Multiple comparisons are not performed because the overall test does not show significant differences across samples.

As reported in Table 14, the difference between the experienced and novice participants performances were significant at $p < .05$ for the components of beliefs, knowledge, practices, confidence and skills, and consistency and consequences. Therefore, it can be concluded that, overall, the use of e-portfolios significantly affected the experienced participants.

To show the changes throughout the three phases of e-portfolio within each group, two sets of Friedman's tests were run. Table 15 shows the results.

Table 15: Pairwise Comparisons: Friedman's Rank Order Test on the Scores of E-Portfolio Obtained by Novice and Experienced Participants in Three Phases

	Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. ^a
Novice	Phase1-Phase2	-.70	.21	-3.30	.00	.00
	Phase1-Phase3	-1.27	.21	-5.97	.00	.00
	Phase2-Phase3	-.56	.21	-2.66	.00	.02
Experienced	Phase1-Phase2	-.39	.21	-1.86	.06	.18
	Phase1-Phase3	-.86	.21	-4.05	.00	.00
	Phase2-Phase3	-.46	.21	-2.18	.02	.08

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed. The significance level is .05.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

As it is evident from Table 15, significant improvements were observed from phase 1 to phase 2, and phase 2 to phase 3 among the novice participants. However, the experienced participants did not show significant improvement from phase 1 to phase 2, while in phase 3, the significant improvement was observed. Figures 2 and 3 show the progress of each groups based on rank-order success.

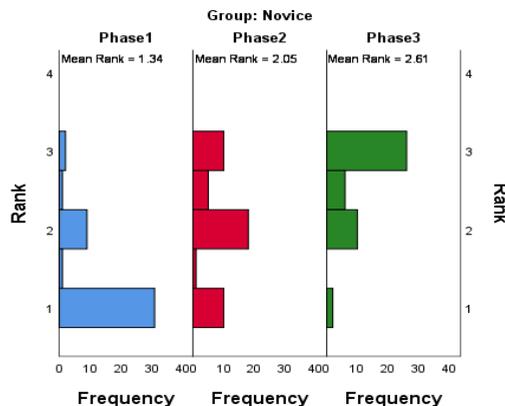


Figure 2: Novice Participants' Scores on the Developed E-Portfolios in Three Phases

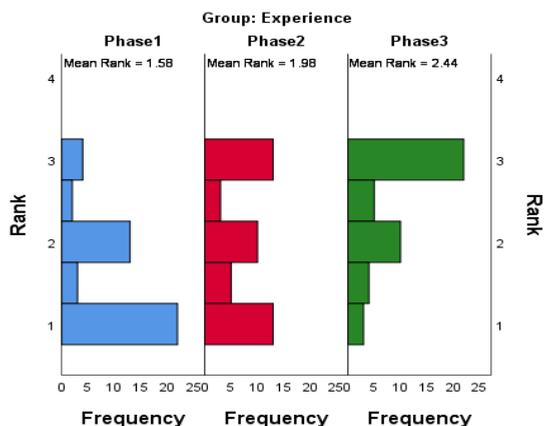


Figure 3: Experienced Participants' Scores on the Developed E-Portfolios in Three Phases

As illustrated, both novice and experienced EFL teachers represented TAI development in light of their e-portfolios. However, the experienced group resisted identity change and postponed it to the third phase of e-portfolio development.

Contribution of E-portfolio to the Development of Teachers' Assessment Identity

To provide appropriate responses for the second research question, considering how the use of e-portfolio contributed to the development of novice and experienced Iranian EFL teachers' assessment identity, a semi-structured interview was carried out. The results of the analysis obtained by MAXQDA led to the emergence of nine themes/codes in novice EFL teachers' interview data (Figure 4). Interestingly, all the participants (100%) unanimously agreed that e-portfolio plays a critical role in EFL teachers' assessment identity growth. Concerning the ways through which e-portfolio can contribute to TAI development, the results indicated that 54.6% of the respondents considered it useful because it "shows the process of development" and "entails reflection" by the users. Moreover, 18.2% of the novice teachers maintained that the use of e-portfolio would facilitate

identity development by making “the recall of information” easier. Others raised three themes/codes with identical frequencies arguing that e-portfolio is helpful in TAI development because it is “a good source of knowledge”, “includes various assessment samples/tasks”, and “represent various dimensions of assessment” for EFL teachers.

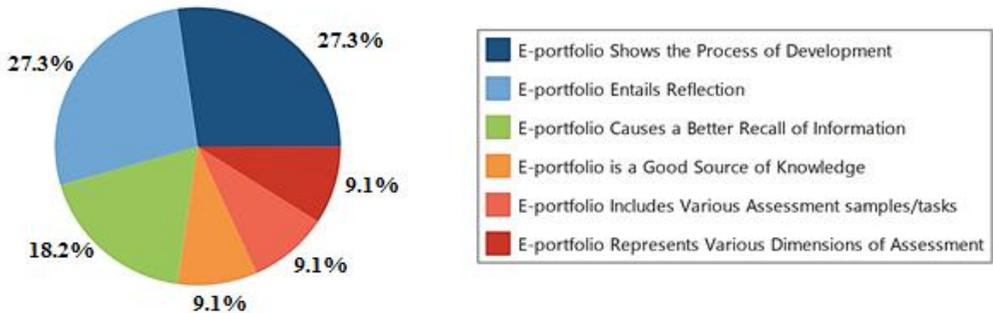


Figure 4: Novice EFL Teachers’ Perceptions about the Contributions of E-portfolio to TAI Development

In a similar manner, all the experienced EFL teachers (100%) approved the contribution of e-portfolio to TAI development. The analysis of their interviews ended in 10 common themes/codes (Figure 5). More particularly, the respondents argued that the potentiality of e-portfolio in showing “the developmental trajectories of TAI” is one of the main reasons behind its efficacy (30.8%). Additionally, it was stated by 30.8% of the teachers that e-portfolio develops assessment identity because it “entails reflection on one’s action” and provides “a record of one’s actions” (15.4%, respectively). The five remaining extracted themes were pinpointed by the rest of the teachers (each 7.7%). They considered e-portfolio to influence TAI development because it “involves long-term practice”, “enhances teacher’s confidence”, “provides long-term insights for teaching/learning”, “connects various dimensions of TAI”, and is “a resource for increasing assessment knowledge”.

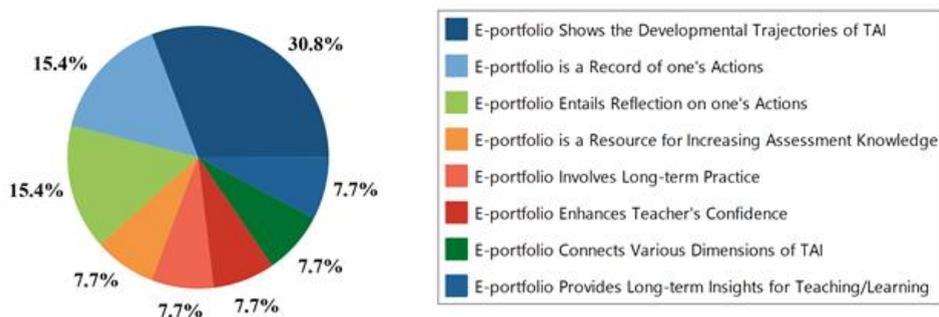


Figure 5: Experienced EFL Teachers' Perceptions about the Contributions of E-portfolio to TAI Development

Below are some sample interview responses that represent the mentioned themes/codes raised by the respondents.

I think the use of e-portfolio was so practical to the development of assessment identity because we focus on the process of our identity, our understanding of the issues. It makes us think, reflect, and ponder on the issues (Novice Teacher, 1).

In my opinion, the use of e-portfolio is one of the most important ways to maintain and develop one's identity since it shows the developmental paths of a teacher's assessment identity over a period of time (Novice Teacher, 2).

In fact, it was very helpful in my TAI development. It helps me to remember my previous practices and the changes I have gone through over the years. And the questions in your e-portfolio were a good source of assessment knowledge (Novice Teacher, 4).

I believe that e-portfolio contributes to TAI growth to a large extent, through providing a variety of assessment samples and tasks that reflected various dimensions of assessment (Novice Teacher, 5).

As e-portfolio is a record of one's actions, keeping one and examining it continuously to reflect upon one's previous actions and make any necessary modifications can be of great help in developing TAI. E-portfolio can show and develop the developmental trajectories of TAI over time. As identity is time sensitive, e-portfolio can be really beneficial since it involves reflection and practice over a course of time (Experienced Teacher, 1).

I found e-portfolio of great help. I could keep a record of my practices and track my own changes and development with regard to different components of assessment identity (Experienced Teacher, 3).

E-portfolios show the developmental paths of our identity. At the end of the day it is not just our students who should feel confident about what they have achieved, teachers also need to feel the same way. The confidence which is gained through trying new methods can finally add to our identity (Experienced Teacher, 4).

Actually, the use of an e-portfolio has offered a clear advantage to me in terms of my assessment identity development. It has provided a rich resource for me to increase my knowledge about the notion of teacher assessment identity. Furthermore, it has helped me make connections among various aspects of TAI. I have also gained insights and achieved significant learning outcomes over time and developed my identity as an EFL assessor (Experienced Teacher, 5).

In conclusion, the analysis of interview data in this research question indicated that both novice and experienced EFL teachers unanimously (100%) agreed on the considerable contribution of using e-portfolios to maintain and develop EFL teachers' assessment identity status. More specifically, the novice teachers believed so because e-portfolio "shows the

process of development” and “entails reflection”, “makes the recall of information” easier, “includes various assessment samples/tasks”, “represents various dimensions of assessment” for EFL teachers, and is “a good source of knowledge”. As for the experienced EFL teachers, they defended the use of e-portfolio for TAI growth because it manifests “the developmental trajectories of TAI”, “entails reflection on one’s action”, provides “a record of one’s actions”, “involves long-term practice”, “enhances teacher’s confidence”, “provides long-term insights for teaching/learning”, “connects various dimensions of TAI”, and is “a resource for increasing assessment knowledge”.

DISCUSSION

The results obtained by the Independent Median Tests indicated that there was a significant difference between the experienced and novice EFL teachers’ TAI at $p < .05$ for the components of beliefs, knowledge, practices, confidence and skills, and consistency and consequences. More specifically, the use of e-portfolio significantly affected the experienced participants in comparison with the novice ones. A possible reason for this can be the experienced EFL teachers’ higher multi-media and technology literacy in teacher education. Hence, they formed a deeper understanding of the contribution of e-folios in developing their identity and practice. Moreover, as pinpointed by Strudler and Wetzel (2005), e-folios document teachers’ identity journey over time. Hence, it can be contended that since novice EFL teachers were at the beginning of their career, their assessment identity was not in full swing, and the use of e-folios did not significantly improve their identity status. Additionally, this non-significant impact of e-folios on novice EFL teachers’ assessment identity can be ascribed to the short period of using e-folios, which was two months. For experienced EFL teachers, this period was enough as they might have built upon their past experiences along with e-folios. Hence, their assessment identity was more affected by the e-portfolios.

This finding lends support to a bulk of research on teacher identity, which endorses that teacher identity is a dynamic and ongoing process that modifies and improves through time and reflection. As a result, the experienced EFL teachers' assessment identity was significantly affected by e-folios given their more experience and reflection skills. Likewise, the results of Friedman's tests revealed significant improvements throughout the three phases of e-portfolio from phase 1 to phase 2, and phase 2 to phase 3 among novice participants. However, the experienced participants did not show significant improvement from phase 1 to phase 2, while in phase 3, a significant improvement was observed. The results are in line with Looney et al. (2017), who maintained that TAI is a developmental and ongoing process. Novice EFL teachers might have demonstrated more improvements in TAI over the three phases of e-portfolios probably because of their more enthusiasm and fluidity of their identity at the start of their profession. They made explicit struggles to form an identity for themselves as L2 assessors. Another reason for having more room for identity shift in novice teachers can be the fact that their epistemological and pedagogical beliefs have not fully fledged in contrast to experienced teachers. Hence, their previous teaching and assessment beliefs are not that much solid and limitedly influence their identity. This echoes Huang et al.'s (2019) proposition that teachers' epistemological and pedagogical beliefs play a critical role in their identity (re)formation. The higher the experience level, the harder the identity reformation.

As for the experienced EFL teachers, they did not show significant improvements in the first two phases of e-portfolio preparation probably because of their resistance to change and the fact that their identity had already been crafted. In other words, they had a closed identity system at the beginning of preparing e-portfolios, but given the depth and breadth of e-portfolio tasks and activities, they succumbed and their identity changed in the third phase. Furthermore, in light of these interpretations, it is warranted to claim that, owing to their experiences and established professional identity, experienced EFL teachers are usually change-resistant, especially

when it comes to psycho-emotional and identity-related factors. Consequently, they resisted TAI change in the first two e-portfolios but manifested a leap or jump in the third e-portfolio given the attractiveness of materials and tasks provided by the researchers.

In the interview phases, both novice and experienced Iranian EFL teachers agreed that e-portfolio has had great potentialities to develop TAI. More precisely, the participants contended that e-portfolio could contribute to TAI development given its capacity to provide a long-term, developmental trajectory of TAI, instigate reflection on assessment practices, be a source of assessment knowledge, and represent TAI dimensions through time and a collection of teachers' works. The results are in harmony with those of Fu et al. (2022), who explored the impact of e-portfolio on shaping L2 teachers' assessment identity in British Columbia. The analysis of e-portfolios and the interview held with the participants revealed that the teachers' understanding of assessment for learning practices and teacher identity as assessors changed via the e-portfolio development process. Moreover, the results are in line with those of Zhou et al. (2013), who conducted a study on the ways through which e-portfolios could shape teachers' identity. Collecting and analyzing seven e-portfolios, the authors argued that e-portfolios have utilities that fit well with the nature of TI development.

The reason for placing equal emphasis on the utility of e-portfolio for TAI development can be the participants' positive attitudes toward assessment and development of e-portfolios. Moreover, the findings can be attributed to the participants' equal technological pedagogical content knowledge (TPACK), considering the electronic and technological tools beneficial for L2 teachers' assessment including e-portfolios. Therefore, both novice and experienced groups endorsed the impact of e-portfolio on their identity as assessors. This harmony, however, is in a sharp contrast with the results of Nazari et al. (2019), who claimed that experienced teachers have a higher TPACK in comparison with novice teachers. In a similar manner, this unanimity in the participants' perceptions of both

groups may be due to the short period of e-portfolio development. This can be justified by Lambert et al. (2007), who maintained that e-folios develop teachers' identity over time.

Additionally, the results can be ascribed to the participants' previous training and professional development programs they had gone through regarding the use of technologies in assessment and professional development. The participants of both groups might have passed or taught several computer-assisted language learning (CALL) courses in which the potentials of e-portfolios for identity development had been discussed. Hence, they formed a similar understanding and belief concerning the use of this technology in TAI development.

CONCLUSION AND IMPLICATIONS

On the basis of the obtained results, it is concluded that TAI is a dynamic construct, which can be effectively represented in EFL teachers' e-portfolios. In other words, given the reflective and process-oriented essence of TAI, the use of e-portfolios can considerably contribute to its development. As e-portfolios require self-reflection and provide a record of one's assessment beliefs and practices, they can play a crucial role in teachers' identity development/transformation. Additionally, it can be asserted that teaching experience is an influential factor in TAI like many other aspects of L2 education. The way an experienced L2 assessor perceives him/herself may vary from that of a novice teacher, who has just initiated his/her assessment identity journey.

Drawing on these insights, the present study can be beneficial for theoretical and pedagogical domains. Theoretically, it extends the literature and conceptualizations of TAI by highlighting its dynamism. Moreover, it capitalizes on the utility of digital technologies (e.g., e-portfolios) in (re)crafting EFL teachers' identity as assessors. Pedagogically, EFL teachers may find this study useful in that they can promote their understanding of assessment identity and its developmental paths in light of digital technologies. They can also realize the multi-dimensional nature of TAI that

represents itself in reflective tools like e-portfolios. Furthermore, the study can be advantageous for EFL teacher educators, who can propose assessment-related training courses and workshops to develop teachers' assessment identity through technologies and the cyberspace. To do so, they can teach and explain the various components of TAI to both pre-service and in-service EFL teachers.

Likewise, L2 researchers can take advantage of this study in that they can recognize the dynamism TIA in light of e-portfolios, which has been limitedly (if any) explored in EFL contexts. Most of the existing studies on TAI are either theoretical or validation studies, hence L2 scholars can examine many unexplored avenues in this line of research. In spite of these implications, this study has a limited generalizability scope since the data were gathered from a small sample of 22 EFL teachers in only two months. Hence, care should be taken when generalizing the findings to other contexts. Furthermore, TAI was only inspected through interviews and e-portfolios uploaded on a website, while using complementary research tools (scales, narratives, diaries, and reflective journals) would provide a better picture of TAI dynamics. To bridge these gaps, future researchers can use mixed-methods and qualitative research designs and collect richer data regarding EFL teachers' assessment identity. Moreover, the role of cultural factors in TAI can be an interesting topic for future research. The facilitative role of other forms of technologies in developing TAI is also recommended to avid scholars. Finally, the correlation between TAI and other constructs in teacher education like digital assessment literacy, agency, positioning, TPACK, and assessment competence is also suggested to future researchers.

Disclosure statement

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References

- Adie, L. (2013). The development of teacher assessment identity through participation in online moderation. *Assessment in Education: Principles, Policy & Practice*, 20(1), 91-106.
<https://doi.org/10.1080/0969594X.2011.650150>
- Akkerman, S. F., & Meijer, P. C. (2011). A dialogical approach to conceptualizing teacher identity. *Teaching and Teacher Education*, 27(2), 308-319.
<https://doi.org/10.1016/j.tate.2010.08.013>
- Estaji, M., & Ghiasvand, F. (2021). Assessment perceptions and practices in academic domain: The design and validation of an assessment identity questionnaire (TAIQ) for EFL teachers. *International Journal of Language Testing*, 11(1), 103-131.
- Barger, C. (2022). Metaphors and methods: The curious alignment that shapes our inquiries about teacher identity. In A. Zimmerman (Eds.), *Methodological innovations in research and academic writing* (pp. 305-322). Pennsylvania: IGI Global. <https://doi.org/10.4018/978-1-7998-8283-1.ch016>
- Beauchamp, C., & Thomas, L. (2009). Understanding teacher identity: An overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education*, 39(2), 175-189.
<https://doi.org/10.1080/03057640902902252>
- Beijaard, D. (2019). Teacher learning as identity learning: Models, practices, and topics. *Teachers and Teaching*, 25(1), 1-6.
<https://doi.org/10.1080/13540602.2019.1542871>
- Beijaard, D., & Meijer, P. C. (2017). Developing the personal and professional in making a teacher identity. In D. J. Clandinin & J. Husu (Eds.), *The sage handbook of research on teacher education* (pp. 177-192). New York: Sage.
- Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*, 20(2), 107-128. <https://doi:10.1016/j.tate.2003.07.001>
- Bennett, D., Rowley, J., Dunbar-Hall, P., Hitchcock, M., & Blom, D. (2016). Electronic portfolios and learner identity: An ePortfolio case study in music and writing. *Journal of Further and Higher Education*, 40(1), 107-124.
<https://doi.org/10.1080/0309877X.2014.895306>

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Brookhart, S. M. (2011). Educational assessment knowledge and skills for teachers. *Educational Measurement: issues and practice*, 30(1), 3-12.
<https://doi.org/10.1111/j.1745-3992.2010.00195.x>
- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative*. Upper Saddle River, NJ: Prentice Hall.
- Dellinger, A. B., Bobbett, J. J., Olivier, D. F., & Ellett, C. D. (2008). Measuring teachers' self-efficacy beliefs: Development and use of the TEBS-Self. *Teaching and Teacher Education*, 24(3), 751-766.
<https://doi.org/10.1016/j.tate.2007.02.010>
- Derakhshan, A., & Nazari, M. (2022a). "I am fed up with the criticisms": Examining the role of emotional critical incidents in a novice teacher's identity construction. *The Asia Pacific Education Researcher*.
<https://doi.org/10.1007/s40299-022-00666-1>
- Derakhshan, A., & Nazari, M. (2022b). Examining teacher identity construction in action research: The mediating role of experience. *Educational Studies*.
<https://doi.org/10.1080/03055698.2022.2073177>
- Fu, H., Hopper, T., Sanford, K., & Monk, D. (2022). Learning with digital portfolios: Teacher candidates forming an assessment identity. *Canadian Journal for the Scholarship of Teaching and Learning*, 13(1), 1-22.
<https://doi.org/10.5206/cjsotlracea.2022.1.11108>
- Gatbonton, E. (2008). Looking beyond teachers' classroom behavior: Novice and experienced ESL teachers' pedagogical knowledge. *Language Teaching Research*, 12(2), 161-182. <https://doi.org/10.1177/1362168807086286>
- Granberg, C. (2010). E-portfolios in teacher education 2002–2009: the social construction of discourse, design and dissemination. *European Journal of Teacher Education*, 33(3), 309-322.
<https://doi.org/10.1080/02619761003767882>
- Heath, M. (2003). *Telling it like it is: Electronic portfolios for authentic professional development*. Retrieved from
<https://files.eric.ed.gov/fulltext/ED490585.pdf>
- Huang, K., Law, V., & Lee, S. J. (2019). The role of learners' epistemic beliefs in an online community of Inquiry. *British Journal of Educational Technology*, 50(4), 1882-1895.

- Jan-nesar, M. Q., Khodabakhshzadeh, H., Motallebzadeh, K. & Khajavy G. (2021). Measuring EFL teachers' assessment identity: Development and validation of a questionnaire. *Journal of Language and Translation*, 11(1), 29-46. <https://doi.org/10.10.30495/TTLT.2021.679444>
- Kayi-Aydar, H. (2019). Language teacher identity. *Language Teaching*, 52(3), 281-295. <https://doi.org/10.1017/S0261444819000223>
- Kocabaş-Gedik, P., & Ortaçtepe Hart, D. (2021). It's not like that at all: A poststructuralist case study on language teacher identity and emotional labor. *Journal of Language, Identity & Education*, 20(2), 103-117. <https://doi.org/10.1080/15348458.2020.1726756>
- Lambert, C., Depaepe, J., Lambert, L., & Anderson, D. (2007). E-portfolios in action. *Kappa Delta Pi Record*, 43(2), 76-81. <https://doi.org/10.1080/00228958.2007>
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. New York: Sage.
- Looney, A., Cumming, J., van Der Kleij, F., & Harris, K. (2017). Reconceptualising the role of teachers as assessors: teacher assessment identity. *Assessment in Education: Principles, Policy & Practice*, 25(5), 442-467. <https://doi.org/10.1080/0969594X.2016.1268090>
- Lorenzo, G., & Ittelson, J. (2005). An overview of e-portfolios. *Educause Learning Initiative*, 1(1), 1-27.
- McAlpine, M. (2005). E-portfolios and digital identity: Some issues for discussion. *E-Learning and Digital Media*, 2(4), 378-387. <https://doi.org/10.2304/elea.2005.2.4.378>
- Mgarbi, H., Chkouri, M. Y., & Tahiri, A. (2021). Towards a new construction of digital identity based on the e-portfolio approach. *International Journal of Open Information Technologies*, 9(11), 37-42.
- Nazari, N., Nafissi, Z., Estaji, M., & Marandi, S. S. (2019). Evaluating novice and experienced EFL teachers' perceived TPACK for their professional development. *Cogent Education*, 6(1), 1632010. <https://doi.org/10.1080/2331186X.2019.1632010>
- Richards, J. C. (2021). Teacher, learner and student-teacher identity in TESOL. *RELC Journal*, 1-15. <https://doi.org/0033688221991308>
- Robson, J. (2018). Performance, structure and ideal identity: Reconceptualising teachers' engagement in online social spaces. *British Journal of Educational Technology*, 49(3), 439-450. <https://doi.org/10.1111/bjet.12551>

- Schutz, P. A., Nichols, S. L., & Schwenke, S. (2018). Critical events, emotional episodes, and teacher attributions in the development of teacher identities. In A. Paul Schutz, J. Hong, & D. C. Francis (Eds.), *Research on Teacher Identity* (pp. 49-60). Cham: Springer.
- Strauss, A. & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. New York: Sage.
- Strudler, N., & Wetzel, K. (2005). The diffusion of electronic portfolios in teacher education: Issues of initiation and implementation. *Journal of Research on Technology in Education*, 37(4), 411-433.
<https://doi.org/10.1080/15391523.2005.10782446>
- Trent, J. (2017). "Being a Professor and Doing EMI Properly Isn't Easy". An identity-theoretic investigation of content teachers' attitudes towards EMI at a University in Hong Kong. In B. Fenton-Smith, P. Humphreys, & I. Walkinshaw (Eds.), *English medium instruction in higher education in Asia-Pacific* (pp. 219-239). Cham: Springer.
- Wood, A. (2016). Learning, assessment and professional identity development in public health training. *Medical Teacher*, 38(6), 594-598.
<https://doi.org/10.3109/0142159X.2015.1073242>
- Yazan, B. (2018). A conceptual framework to understand language teacher identities. *Journal of Second Language Teacher Education*, 1(1), 21-48.
- Younghusband, C. H. (2021). E-portfolios and exploring one's identity in teacher education. *The Open/Technology in Education, Society, and Scholarship Association Journal*, 1(2), 1-17.
<https://doi.org/10.0.71.181/otessaj.2021.1.2.20>
- Zhou, M., Chye, S., Koh, C., & Liu, W. C. (2013). Understanding teacher identity through the use of e-portfolios with pre-service teachers. In J. Platos (Ed.), *Proceedings of the second international conference on e-technologies and networks for development* (pp. 20-27). United States: Society of Digital Information and Wireless Communications.