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## ICT Transformation in Education: Its Impact on Language Teachers' Professional Identities

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### ABSTRACT

Rapid and continuous changes in digital technologies have changed both classroom practices and teacher profiles in education. It can be argued that a new context of teaching may lead some teachers to develop a different teacher identity in order to meet the needs of the era. Within this perspective, this case study attempts to explore the impacts of Information and Communication Technologies (ICT) revolution in education on teachers' professional identity through the lens of three English instructors from three different contexts in Turkey. The study particularly focuses on reflections of teachers during the pandemic. As a theoretical framework, the study adopts Wenger's (1997) social theory of learning and, within this framework, it discusses these teachers' professional identities in relation to their ICT usage. In particular, three modes of belonging, Engagement, Imagination and Alignment, are underlined. A qualitative approach is employed based on the written history documents of the participants and semi-structured interviews as data collection tools. The findings are gathered with a deductive thematic analysis, and they illustrate that teachers have some external and internal difficulties regarding their ICT usage, and they form a new shape of professional identity mainly through collaboration, community expertise and contributing new ideas in their school contexts. Although the use of new digital technologies mostly enables them to adopt a positive and modern teacher identity in their teaching contexts, it also leads some of them to sometimes question their teacher identity due to their limited ICT knowledge and competence. Thus, the study suggests some implications both for language teachers to invest in their digital identities, and for school administrations to create a friendly atmosphere where the community of expertise can be shared freely among teachers.

**Keywords:** teacher identity; ICT, digital technologies; professional identity; digital identity

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## Introduction

With the digitalization of society and an increasing access to digital tools, integrating information and communication technologies (ICT) into teaching practices has today become a growing trend (Prestridge & Tondeur, 2015; Shin et al., 2011; Tondeur et al., 2017). This dramatic trend has also extended the framework of teacher knowledge, which was initially regarded as content knowledge (Shulman, 1986), then as pedagogical content knowledge (Shulman, 1987), and lastly as pedagogical and technological content knowledge (Mishra & Koehler, 2006). This redefined teacher knowledge stresses that the role of pedagogy, content and technology knowledge does not work in isolation but in a mutual interplay. As the framework implies, the dynamics of teacher concept and teaching process have altered, and the demand for digitally competent teachers has increased accordingly (Insterfjord & Munte, 2017). With the reemerging pedagogy and students-teacher interaction (Burden, Brindley & Schuck, 2016), some new roles have been added to the teachers, especially in terms of ICT and its application in teaching contexts. As Painter (2001) states, because of its complex nature, not every employment of technology in the classroom guarantees an effective utilization and integration. At this point, digitally competent teachers are generally supposed to have the ability to use new approaches in terms of ICT integration into education to promote an effective teaching and learning (Insterfjord & Munte, 2017; Tella et al., 2007), the skill to use technology so as to develop higher mental functioning skills such as critical thinking, problem-solving, and communication skills (Saavedra & Opfer, 2012), and the competence to facilitate individualized learning with student-centered teaching (Lei, 2010).

However, especially with the outbreak of Covid-19 pandemic in 2019, while the digitalization of teaching contexts has made things easier for some teachers who can keep up with the new face of teaching methodology and update their earlier conceptualizing of teacher knowledge, some others have a great difficulty in adapting to the new era for a variety of reasons. Mishra and Koehler (2006, p.1023) summarize these reasons as “fear of change” and “lack of time and support”. With an attempt to have a more detailed explanation and categorization, Ertmer (1999) defines first order and second order barriers against the use of technology. Whereas the former refers to external factors such as training, support or lack of access to resources, the latter means internal handicaps like the teachers’ low ICT self-efficacy or competence, their perceived beliefs and attitudes towards the value of technology. In addition to these barriers, Kopcha (2012) stresses the lack of professional development in the related area, as well. To sum up, due to the reasons listed above, ICT integration into the classrooms has become a stressful and challenging process for lots of teachers.

Based upon the ideas that identity is in the constant state of reconstruction (Danielewicz, 2001) and that teacher identity is being reshaped as a result of the alternations in teaching practices (White, 2016), the present study hypothesizes that changing dynamics in classroom practices and education, particularly emerging ICT applications, may result in some changes in teachers’ professional identities depending on how digitally competent they feel and how effectively they integrate ICT into their classes. In a similar fashion, using ICT in the classroom and identity construction of teachers have been extensively studied as separate issues so far (e.g. Gülbahar, 2008; Insterfjord & Munthe, 2017; Rana, 2020). However, the interplay between ICT and teacher identity is an emerging research field with a limited number of studies (Can & Karacan, 2021; Fransson, Lindberg & Olofsson, 2019; Lai & Jin, 2021; Valentyn, 2019). Thus, the present study aims to fill a gap by making a significant contribution to the literature in the area.

## Teacher Identity

In order to comprehend what a teacher identity refers to, the concept of identity itself should be first defined. It should be acknowledged that defining identity, as Beauchamp and Thomas (2009, p. 175) state, is a “challenging endeavor” mainly because it is an “elusive, dynamic and multidimensional construct that changes shapes dependent on the theoretical lens through which it is observed” (Richardson & Watt, 2018, p.28). While it is simply “who you are” (Joseph, 2006, p. 486) from a sociological perspective, it is considered as a complex internal construction from the psychosocial approach (Fielding, 2015). Bearing in mind that there is not a unique and fixed definition of identity, Pennington (2015, p.16) defines it as a “set of characteristics uniquely associated with that person”. By delving into the issue in a more detailed way, Cummins (2011) suggests that identity has mainly two aspects, one of which comes inherently with our genes while its other facet evolves in time through our experiences and interactions with people. As it can be summarized from these definitions, identity is a “dynamic rather than stable, constantly evolving phenomenon” (Beauchamp & Thomas, 2009, p.177).

Considering that teaching is a socially constructed activity shaped by negotiations of meaning and interaction (Johnson, 1996), it is not surprising that teacher identity is constructed through the relationship between the individual and others through an ongoing process (Bakhtin, 1990). Referred as a “complex, multi-faceted, and ever evolving” construct (Pennington, 2015, p.18), teacher identity can be defined as “how teachers define themselves to themselves and to others” (Lasky, 2005, p.901). In a deeper sense, there is a parallelism between teachers’ definitions of being a good teacher and their identity development (Alsup, 2005). As being a teacher requires following changes and developments in the field, it is suggested that, in the 21<sup>st</sup> century, a good teacher is also the one who can adapt to new technologies in teaching practices (Ertmer & Ottenbreit-Leftwich, 2010). This widely-accepted notion and the emerging need for the transfer of traditional ways of teaching into digital ones have resulted in changing established identities for some teachers (Norton, 2017; Nunan, 2016). As Cheung, Said and Park (2014) claim, this change is formed when teachers push their limits and leave their comfort zones by using new teaching strategies like ICT integration. At this point, it can be argued that a positive shift in teacher identity constitutes a central place in the development of a teacher. Teacher’s professional identity, then, is at the heart of teaching profession mainly because it provides a framework for teachers to develop their own ideas about “how to be”, “how to act” and “how to understand” their role and profession in society (Sachs, 2005, p. 15). Similarly, to stress the importance of developing oneself as a teacher, Hammerness et al. (2005, p. 384) argue that “the identities teachers develop shape their dispositions, where they place their effort, whether and how they seek out professional development opportunities, and what obligations they see as intrinsic to their role”. Overall, teacher identity is a very crucial concept since a positive formation and development of a teacher identity can act as a mediator to promote effective teaching outcomes.

With his study on integrating new technologies into the classroom and innovative teacher identities, Valentyn (2019) reveals that teachers trying to harmonize digital technologies with teaching practices have adopted the role of supporter, mentor, coach, guide and motivator, and developed a new teacher identity in this process. Similarly, Can and Karacan (2021) aimed to study how a group of pre-service English language teachers shape their early teacher identities via an Instructional Technologies course, conducted with ICT and emerging technologies. Aligning with the results of Valentyn’s (2019) study, teachers in this group reported that they gained different identities such as modern teacher identity, social teacher identity or technologically competent teacher identity thanks to the course they took. However, sometimes these new identities can cause a problem among teachers in the same context. Trent and Shroff (2013) studied some pre-service teachers who had eight-week teaching practicum concerning using e-portfolios. The study shows that although most of the teachers gained a positive teacher identity such as up-to-date teachers, digitalization led to a discrimination between two groups of pre-service teachers who perceived themselves as modern

or traditional. Similar to pre-service teachers in Trent and Shroff's study, some in-service teachers suffer from emerging ICT applications, which may damage their teacher identities. For instance, Fransson et al. (2019), who studied two EFL teachers' self-understanding with digitalization, show us how a language teacher with long years of teaching experience can develop a negative professional self because of keeping behind technological developments. On the other hand, the other teacher having less experience of teaching perceives himself as innovative and effective thanks to his high ICT self-efficacy and skills. The study also shows how a powerful digital identity of the teachers brings about effective and up-to-date classroom activities.

While these studies focus on how digitalization has an effective role in reshaping teacher identity in general, Lai and Jin (2021) conducted a different study with 280 English language teachers by investigating how different teacher identity orientations determine the type of technology implemented in classrooms. The findings suggest that there is a relation between the type of technology used in the classroom and having a specific teacher identity orientation. For example, the findings reveal that having a learner-centered orientation has facilitated technology adaptation for teachers more.

However, the studies in the literature demonstrate that there is still a need to understand the notion of teacher identity within a digital world because there is a strong correlation between developing a positive teacher identity and its impacts on meaningful learning experiences (Ertmer, 2005; Rokeach, 1968). This study is distinguished from the other studies in the sense that it specifically focuses on language teachers' identity development and, additionally, it tries to hold a mirror to this emerging issue from three different teaching contexts. For this reason, the present study aims to explore whether L2 English instructors' identities have been reshaped with the integration of ICT into their teaching practices.

## **Theoretical Framework**

In order to get a useful understanding of teachers' identity development in relation to their ICT adaptation, this study discusses teacher identity within the framework of Wenger's Social Theory of Learning. As one of the four components of this theory argues, "identity is not some primordial core of personality that already exists. Nor is it something we acquire at some point in the same way that, at a certain age, we grow a set of permanent teeth" (Wenger, 1997, p.154). Rather, he conceptualizes identity as a "becoming" and a thing shaped in its social context mainly through negotiation and participation. In other words, participants are supposed to be active in the practices of social communities so that they can construct their identities. Similarly, in this study, three modes of belonging in Social Theory of Learning, namely engagement, imagination and alignment, are foregrounded to better understand teachers' identity transformation as a result of emerging ICT usage. In this context, engagement is seen as the active participation and "the mutual process of negotiation of meaning" (p.173). As a way of creating new images of the world, imagination refers to a flexible positioning to "try new ideas and explore new relations", and "knowing what others are doing" (p.185). Lastly, alignment is considered as coordinating one's actions to find common ground to act. As the name suggests, it is actually aligning yourself with the demands and expectations of the community. In this framework, the study discusses how the participants construct their ICT knowledge and apply it into their own contexts, whether their schools demand anything specific about the application of digital technologies, how they can align with their expectations and finally how this digitalization process shapes their teacher identity.

## Methodology

This study has adopted a qualitative approach which is defined as “inductive, with the purpose of describing multiple realities, developing deep understanding, and capturing everyday life and human perspectives” (Trumbull, 200, p. 101). In order to obtain deeper insights into the subject, we have used a multiple case study. Although the results cannot be generalized to the population because of the limited number of participants, this method can be effective in exploring the phenomenon in its own context (Baxter & Jack, 2008). As teacher identity construction and development may vary in accordance with the context and personal experiences, an in-depth analysis of each case should be done through an interpretivist approach, which is supposed to help us make a better understanding of the topic. For this purpose, the following research question has been addressed throughout the study:

- Does ICT transformation in education have an effect on reshaping L2 English instructors’ professional identities? If so, how are their identities reshaped within their community of practice?

## Participants and Setting

The study includes a multiple case study with three volunteers who were selected purposively. The selection criteria were the participants’ various teaching experiences and their contexts so that the cases could provide a better insight to the issue from different perspectives. The first participant has 20 years of teaching experience, the other participant is nearly at the end of her teaching career with 38 years of experience in the field, and the last participant is just at the beginning of her teaching career. Regarding their contexts, they are teaching at different levels such as undergraduate students, preparatory class students, and students of vocational school, respectively. The following table illustrates the demographic profile of the participants:

Table 1  
*Demographic Profile of Case Study Participants*

Pseudonyms	Teaching Experience	Major	Current Setting	Education Type
Selin	20 years	English Instructor	Teaching at English Language Teaching Department of a state university, Turkey	Hybrid education
Yeşim	38 years	English Instructor	Teaching at Prep Class of a private university, Turkey	Hybrid education
Neslihan	2 years	English Instructor	Teaching at Vocational Schools of a state university, Turkey	Online education

As seen in the Table 1, Selin is an English instructor working at English Language Teaching department for 20 years. With the wide range of courses she has been delivering, such as Syllabus and Materials Design, Career Planning, Community Services, and Language Teaching Practice, she is very experienced and perceives herself competent concerning ICT usage. Due to her visual impairment, she makes an extra effort and uses different strategies to integrate ICT into her classrooms. Currently, she is delivering her classes in a hybrid system with both face-to-face and some online classes. Apart from online classes, the university does not require the academic staff to use any specific ICT application.

Having an experience of teaching at all levels from kindergarten to tertiary, Yesim now works at a preparatory class in a very demanding private university. Despite her 38 years of teaching experience, she feels insufficient when it comes to teaching through new digital technologies. In her school setting, the classes are delivered both online and face-to-face. Including virtual classes, exams and online feedback, she is supposed to use a complex online platform. The mismatch between her ICT competence and school expectations pushes her to reshape her teacher identity.

Lastly, Neslihan is also an English instructor at tertiary level in a state university who has been teaching for almost two years and started to work when the pandemic broke out. As a newly-qualified teacher, her first and only teaching experience was online. Although she is not experienced, she has a perceived high self-confidence and knowledge in ICT.

### ***Data Collection and Analysis***

The data were collected in the Fall semester in 2021 through written history document and semi-structured interviews. All participants were informed about the aim of the study at the outset of the research. Anonymity of their identities was ensured and their consent was acquired verbally.

Since professional identity development is a multidimensional process and involves a retrospective thinking process, the participants were asked to write their responses to the questions in the written history document (presented in the appendix). There were 10 questions about the participants' experiences and strategies concerning ICT use in their teaching contexts. Thus, written history documents formed a basis for us to prepare follow-up semi-structured interview questions to delve more into their histories concerning ICT implementation. Due to the pandemic period, all interviews were conducted online via Zoom meetings. Two interviews were held with Selin, lasting about 75 minutes in total and they were recorded online. With Yesim, a forty-five-minute interview was done, and we arranged a last interview with Neslihan for 50 minutes. All interviews were in their mother tongue, Turkish. But, then, they were translated into English.

For analyzing the data, written history documents and semi-structured interviews were transcribed verbatim into a word document, and then the data were narrowed down through a purposive selection which means "selecting information-rich cases whose study will illuminate the questions under the study" (Patton, 1990, p.169). After that, themes were identified deductively in accordance with the three main categories suggested by Wenger (1997) as Engagement, Imagination and Alignment. With a thick description of each case, the participants' reflections were presented separately. To increase the credibility of the research, member checking was used. The participants read their responses quoted in the study to ensure that the extracts represented their genuine ideas.

## **Cases and Findings**

### ***Selin's Reflections***

Selin works at the English Language Teaching Department in a state university. Being involved in the hybrid education this year, she gives elective courses online while she teaches compulsory courses face-to-face. Despite her willingness to design an ICT-based teaching plan, her school context may not be suitable for it. She remarks:

*Honestly, my school setting does not have many opportunities for technology. During the pandemic period, all the computers in the classrooms were taken out for upgrade. But, there is still no computer in the classrooms. Only, the projectors are working but internet connections in the classrooms don't work properly. So, most of the teachers in the department bring their personal laptops to the school for the classes and we have only a smart board in the department but it doesn't work. Also, for online classes, we cannot connect to the internet at our offices because of poor internet facilities.*

These issues constituted a problem not only for the academic staff but also for the students in Selin's case. Because of the poor internet connection, most of her students had to attend online classes at internet cafes, which decreases the quality of her class. Selin thinks that no matter how competent she was to use digital tools, technical problems casted a shadow over her classes. Due to the technical insufficiency, she kept carrying her own webcam, VGA converter and microphones to deliver her classes at the office. For other technical problems such as lack of a screen, she got help from her colleagues. In addition to these basic technical problems, Selin acknowledges her visual impairment as a problem but not as an obstacle for her to use new digital technologies in her classes.

*Because of my visual impairment which is getting worse, I can't use all the web-based tools such as Google classroom or Kaboot as you do. But, in progress of time, I found some ways to make my students use them even though I can't myself. For example, Language Acquisition is a theoretical course as you know. Each group in the course is supposed to prepare a Kaboot game with ten questions. Although I can't use it myself, the students are doing well. I always check the questions before the class. They share the game ID in chat box and we play it at the end of the class on Fridays. I give bonus for the first 5 students. In this way, they take their own responsibility for learning with ICT. Now, my students tell me that they don't have another teacher that takes the advantages of using technology as I do.*

To integrate ICT into her teaching practices, she also applies some individual strategies such as using dictating programs to give feedback or a voice reader to read students' papers. However, her teacher identity mainly forms as a result of her investment with other people in her teaching context rather than her personal strategies. As a mode of belonging to the community, her direct engagement with the colleagues has an undeniable effect on her teacher identity:

*We have a great harmony at our department. For example, when I need to prepare a PowerPoint presentation, I get help from my colleagues. I am responsible for preparing academic programs and classes. Maybe I cannot use PC effectively while drawing tables but I am good at memorizing things. So, I tell them the checklist and content, and in return, they help me with the ICT. This does not irritate me because we support each other. We are more powerful this way.*

In addition to her direct engagement, the role of imagination plays a crucial role in constructing and reformulating Selin's teacher identity. Wenger (1997, p.176) clarifies the concept of imagination with a metaphor. He claims that "imagination is looking at an apple seed and seeing a tree". In this sense, Selin directs her energy to contribute to a broader picture beyond her teaching context:

*In the past, the students were not really talented at technology and language, but now they are really digital natives and make more various and creative language teaching materials and products. In near future, each student in my class will be a language teacher and today, I have to furnish them with necessary ICT knowledge and skills to prepare them for their jobs.*

In Selin's case, alignment, as a last mode of identification in the current study, mainly takes place while aligning with community expectations.

Although the school did not require any ICT integration for the classes before the pandemic, she has been using technology for teaching for years to get satisfied with her status as an English teacher:

*As English teachers, we are expected to be one step ahead of others. We are accepted as the modern face of education. Thus, we have to keep up with recent digital technologies and integrate them into our classes effectively. I haven't used paper for many years. Additionally, we are 7/24 online teachers nowadays. Although I am 45 years old, I perceive myself as a digitally skillful and modern teacher.*

The quotation above demonstrates that Selin is aware of the shift in education, which is from pen and paper towards digitalization. Adopting a modern teacher identity through ICT usage makes her feel different, important, more powerful, distinctive and successful among other teachers. She believes that the contribution of ICT-based instruction to her teacher identity has resulted in more effective and positive educational outcomes in her class for years.

### ***Yesim's Reflections***

Yesim has 38 years of teaching experience at different levels ranging from kindergarten to tertiary level. Despite this, using ICT in education is the biggest challenge for her due to her lack of technology knowledge. She explains how she has been having difficulty in keeping up with recent technological developments as follows:

*Having begun to teach with only a piece of chalk and a typewriter, I experienced a lot of challenges especially between 2020 and 2021. Before the pandemic, I needed ICT just for mailing or preparing worksheets. Now it's the main tool that I need in teaching. I felt unskilled many times. This is not teaching; this is something different. If you cannot find the right button to click, you are a big zero.*

Yesim works in a very demanding and challenging private university regarding both student profile and school administration. The school setting and its requirements concerning ICT integration sometimes disrupt her teacher identity despite her undeniable years of teaching experience. She explains how some minor issues about technology like downloading a document or connecting to the internet can be a burden even for an experienced teacher like her:

*I accept that the era has changed. However, I usually feel anxious not about how to teach things but about how to integrate technology into my classes. We use an online platform called Blackboard and now each class can be a new surprise for me. Will I be able to download the right document from that platform? Will I be able to upload the assignments there? Am I doing the things wrong again? It is very stressful for me. It is like beginning a new job despite being in it for so many years.*

In the process of her identity formation, Yesim's engagement was in the way of interaction, mutual engagement, getting help, and joint enterprise. The extract below clarifies this better:

*I was new and the department did not provide any orientation about the online platforms to be used. Particularly, the requirements like how to hold an exam on the platform, how to use Turnitin, or how to reach the digital tools were hard for me. Therefore, I asked whether they could appoint me a colleague who could help me with my problems about technology. In this way, I could learn the system.*

Although her teacher identification occurs in the course of an engagement with her colleagues while negotiating the knowledge about how to make use of technology, Yesim develops a negative perception towards her own teacher identity because of her colleagues' attitudes, which pushes her to a dynamic combination of engagement that is sometimes in the form of participation and sometimes in the form of nonparticipation. She says that there were times that she felt helpless and invaluable as a teacher. "Asking too many questions sometimes bothers others. They may not want to deal with you. So, I had times that I couldn't dare it". She adds that: "Despite all these, a few young teachers helped me a lot. They always sent me videos to show how to use *Turnitin* for example, or how to give online feedback to the students. If they hadn't supported me, I wouldn't be a teacher who can manage the ICT problems now".



When it comes to imagination mode of identity construction, Yesim has had a dramatic change in terms of her perception of technology use. “My first teaching material was a typewriter. I used to prepare my materials with it easily. I mean the things were not so complex. You could hold a class with just a pen or a board marker. That was very easy”. It is argued that imagination is a way of “creating new images of the world and ourselves” (Wenger, 1997, p.176). Yesim’s reformulation of her teacher identity is done by trying to update herself concerning ICT. This can be better understood with her words:

*I feel like a drama artist who can change her dance in accordance with the changing music. Now I can see very well that the age is different and I am also a different teacher with more digital competence. I wish I could go a few years back with my current abilities.*

Lastly, alignment with school demands regarding ICT integration seems to have enabled Yesim to take a new direction in her teacher identity. She feels a deep responsibility for her own teaching and she tries to orient herself towards being a more digitally competent teacher. Regarding the issue, she states that

*The turning point for me in realizing the importance of ICT was working at this university. Until that time, technological stuff had generally been dealt with by the head of the department. However, we now have virtual classes and we are using a specific online teaching platform to hold classes, give homework, and construct tests. You have to follow all the requirements in order to satisfy the university and students. I should update myself each year because the technology is changing so fast and so is the youth. Last year was a challenging year for me but now I feel more powerful with my higher self-efficacy in ICT.*

Yesim associates being digitally competent with being more powerful in teaching. She depicts how the concept of teacher identity is subject to change through the course of time. For her, updating content knowledge and skills regarding ICT is a must, and falling behind it also means being insufficient.

### ***Neslihan’s Reflections***

Neslihan has been interested in using digital tools since she was a university student. One year before this study was conducted, she was a PhD student in the department of Computer Education and Educational Technology. However, she dropped it in order to return to ELT department for her future career goals. She thinks that her digital literacy level and ICT competence are very high. However, when it comes to the integration of technology into her classrooms, she still has some problems as depicted below:

*I can’t use ICT tools as much as I expect. The great majority of my students show no interest in ICT since they are not flexible nor open to new ways of learning. They have no intention other than passing the course. Unfortunately, they always demand grammar-focused learning depending solely on teacher-based instruction. Thus, building a learning community with such a student profile is challenging. I always search for suitable digital materials to keep the attention of my students, but it does not work at vocational school. What I have been doing in practice is sometimes incompatible with my professional goals and interests. I sometimes feel that I’m losing my enthusiasm and motivation.*

Despite the fact that her student profile was not keen on digital tools, Neslihan always tried to change their attitudes towards digitalization by insisting on creating an interactive and technologically enhanced classroom environment through some interactive games and digital tools. The following extract illustrates the point better:

*At undergraduate level, I often use Web 2.0 tools in my classes. For listening activities, I sometimes share videos from YouTube according to the level and interest of my students. I often use YouTube videos including some cultural aspects in warm-up activities. I prefer Flipgrid platform for practicing speaking skills. I sometimes assign writing activities on Padlet. For online formative assessment, I prefer in-class response systems such as Quizzes and Kabool!*

As her testimonials indicate, Neslihan's teacher identity has been shaped by engaging with digital tools such as Quizzes or Kahoot!. This engagement with technology acts as a cover for her being naïve in teaching. She turns the situation into advantage thanks to technology-mediated activities. She depicts this issue from her point of view:

*As a newly-qualified teacher who does not have any experience in teaching, being digitally competent was my strength in this period. All the classes I am carrying out are online, which needs ICT competence. This is not just about using computer or knowing the online platform. Beyond these, I am knowledgeable about the educational tools specifically designed for teaching language to adults. I think I compensate my lack of experience with my digital skills. This makes me develop a positive teacher identity even at the beginning.*

Along with the engagement with digital tools, Neslihan also shapes her teacher identity by involving in co-exploring new ideas and new relations in her context. The digital tools that she uses in her classes function as a platform shared between her and her students. She remarks that

*Last year I attended an online course offered by U.S Embassy RELO on "Fostering student motivation and engagement". I learnt lots of useful strategies to implement in English classes. Especially, regarding ICT usage, my awareness increased and I learned how to integrate Web 2.0 tools into language classes. The experiences of other colleagues working at other universities and their ideas regarding innovative classroom practices broadened my horizon. Now, by applying some virtual games on online classes, I take my students from their rooms out to embark on new adventures in language teaching.*

Lastly, Wenger (1997, p.181) argues that "alignment entails an investment of personal energy" to expand identity. Similarly, by developing personal practices, Neslihan also tries to accommodate herself with her teaching philosophy regarding ICT use.

*Honestly, the language teaching policy in our institution does not require any specific strategy to integrate ICT into our courses. The instructors are all free either to use or not to use any kinds of digital tools. The only important thing is not to fall behind the schedule. However, my teaching philosophy is not only something like catching the syllabus or teaching language. I want to be a right model who can make technology a real part of teaching practice and life.*

Considering the findings revealed from interview data, it can be claimed that while attempting to use new digital technologies, they have experienced various problems including basic technical facilities, lack of technology knowledge, and lack of students' motivation towards technology. Along with these challenges and the teachers' way of managing them, their teacher identity is shaped in the forms of engagement with digital tools and community expertise, imagination across the boundaries, and eventually alignment with school demands, community expectations and their own teaching philosophies.

## Discussion and Implications

The present study was aimed to contribute to better understanding of how digitalization plays a dynamic role in renegotiating teacher identity.

Firstly, the study reveals that challenges regarding enactment of digital technologies in education can vary among teachers even if they are in the same subject area and at the same teaching level. According to Ertmer's (1999) categorization, the teachers in this study have the first and the second order barriers i.e. lack of technical facilities or lack of technological knowledge. It seems that each of these teachers reshapes her teacher identity in accordance with her way of managing these digital challenges, her different teaching contexts, and her ICT competence.

Secondly, the findings of the study highlight the importance of community expertise, collegiality and mutual engagement in the process of teacher identity reformation. As Wenger (1997) argues, community membership has an effective role in shaping identity, and this membership can be approved by the display of competence. In other words, when we experience competence, we are recognized as competent, and this helps us form a positive identity. In this respect, it can be suggested that Selin and Neslihan seem to develop an identity of participation, and that when their ICT competence is recognized and valued by their students, this has a big contribution for them to adopt a 'modern' teacher identity. The participants' following words confirm this assumption. Neslihan reports that "I believe that I'm a proficient and modern English teacher in the eyes of my colleagues and students", and Selin recounts that "my students always say that you are doing everything relating to technology, so I can say that I am a high technology teacher despite my age". The contribution of ICT to develop an up-date teacher identity is highlighted in similar studies (Can & Karacan, 2021; Trent & Shroff, 2013; Valenty, 2019). All of these studies suggest that the use of new digital technologies has changed the perceptions of teachers about having a modern teacher identity, which results in positive teaching outcomes for both students and teachers. Additionally, as highlighted in the study of Ballıdağ and Dikilitaş (2021), institutionally supported social environment where the teachers can share their expertise in digitalization makes a contribution to their development.

On the other hand, in Yesim's case, it can be inferred that falling behind expected digital competence may carry a risk in terms of teacher identity. Yesim's comparatively poor relationship with digital tools has sometimes led to an emotional load in her career despite her long teaching experience, which sometimes makes her question her teacher identity. As Wenger (1997) discusses, even though a person can imagine herself in the engagement of community practice, some factors can inhibit her from taking practice. For Yesim, lack of collegiality in her own community of practice not only causes her to adopt an engagement in the form of non-participation but also prevents her from taking risks. This finding in the present study has come into the alliance with the study of Fransson et al. (2019) on how digitalization can reconstruct teachers' self-understanding. In this study, it is suggested that the self-esteem of the young teacher is boosted thanks to his digital teaching practices being valued while the identity of experienced teacher is damaged because of his lack of ICT knowledge. The teachers with an established teaching practice and philosophy should feel secure in order to try new ideas and push their limits. The present study demonstrates that getting help from some teachers with digitalization makes a significant contribution to Yesim's reformulation of her teacher identity as she feels digitally more powerful. At this point, for teachers' lifelong professional development, school settings should provide a welcoming atmosphere in which teachers can freely share their community expertise. Another conclusion drawn from Yesim's experience is that teachers, despite their experience, may need an inductive orientation program specifically designed for the ICT requirements of that department. Similarly, as Carlson and Gadio (2002, p. 119) argue, "providing technical skills training to teachers while using technology is not enough. Teachers also need professional development in the pedagogical application of those skills to improve teaching and learning".

## Conclusion

The study was conducted to get a deeper insight into the concept of teacher identity. To do so, we had an interview with three English instructors with different amounts of experience working in various contexts. Wenger (1997, p. 163) suggests that identity is a "lived", "negotiated", and "social", "learning process". The current study also reveals that teacher identity is subject to the changes and developments in educational settings, and it is a "constant becoming" as Wenger (1997, p. 149) claims. Technology, regarded as a must in education especially during the pandemic period, is naturally expected to contribute to the concept of teacher identity. The findings of the present

study suggest that the participants' engagement with technology and the quality of this engagement has a determining role in shaping or reshaping of their teacher identities. Today, while the lack of ICT knowledge and competence may carry a risk in terms of identity construction, being digitally competent may add value to teacher identity. As forming a self-confident teacher identity brings about positive outcomes in education, stakeholders should invest in building a positive teacher identity by increasing mutual interaction and collegiality in school settings. Thus, the present study concludes that we should increase the awareness of investing in teachers' digital identity, especially during the pandemic period, so that we can facilitate effective teaching outcomes for students. Teachers should also do their best to build a strong digital identity to survive in digital education settings.

Although it is a small case study with restricted number of participants, it is hoped that this study can hold a mirror to the interplay between ICT and teacher identity. Therefore, it is hoped that the study may inspire further studies regarding how community of practice can be utilized to strength teachers' digital identities.

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## APPENDIX

### Questions for the Written History of The Participants

1. Participant's Demographic Information
  - a. Would you please introduce yourself briefly?
  - b. Would you please write about your educational background?
  - c. Would you please write about your past and ongoing teaching experiences? (years of experience / the specific subjects that you have taught before / your past and current experiences / your students' profile / your school setting..etc.)
2. How can you perceive / define yourself as a teacher?
3. How do you think you are recognized as a teacher by others (such as by your colleagues / your students)?
4. If you graded yourself out of 5 concerning the usage /integration of ICT (Information Communication Technology) in the classroom, what would be your score? Why?
5. What was the turning point for you to realize the importance of ICT in teaching practice?
6. In what ways do you integrate ICT into your teaching practices?
7. What challenges do you experience in relation to the practice of ICT usage in your classes?
8. In terms of ICT integration, what is your school demand and policy? Do you think that you can meet your school and students' demands completely in this point?
9. What is your personal history about finding ways to integrate digital tools into your practices? (e.g. getting help from your colleagues/ taking ICT trainings ..etc)
10. After the emerging use of ICT in EFL classrooms, have you felt the need to redefine your teacher identity? Do think that it has an important factor that has shaped your professional identity?

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