The Role of Digital Storytelling as a Reflection Tool in English Language Teachers' Professional Development

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ABSTRACT

The present study aimed to explore English teachers' perceptions about the use of digital storytelling (DST) as a tool of reflection in contributing mainly to their professional development growth. As part of their professional development, the improvement of teachers' TPCK was also a major concern of this research .

Through a qualitative research design, the study attempted to address the research aim and answer the research questions. The research was also a case study that was carried out with the participation of five English teachers, all of whom were PhD candidates in the ELT program in the Faculty of Education, Eastern Mediterranean University (EMU). The data collection tools included semi-structured interview questions, which were divided into three sets (Pre-While-Post), and were given to participants on intervals. The second data collection instrument was the reflection reports, in which the participants were asked to elaborate on the teaching event that they described as a critical incident in their digital story, the strengths of the DST tool, its weaknesses, as well as their suggestions for better implementation and further ways to invest the DST tool in other educational settings .

The data collected from both tools, i.e., the interviews and the reflection reports, were thematically analysed, in line with the research questions of the study. The thematic analysis included two major areas: firstly, teachers' critical incidents and their justification for their choice of story, and secondly, teachers' perceptions in the implementation of DST as a reflection tool contributing to their professional development and TPCK. It was observed that almost all of the selected critical

incidents belonged to the first year of the professional life of the participants, and that one participant narrated in her digital story the chaos created by the changing curriculum and the new teaching method in her teaching context as the 'critical incident'. Findings of the study revealed some positive attitudes towards the DST implementation as a tool for reflection. All participants (except one) praised the use of DST and confirmed some notable improvement in their critical reflection and in their TPCK. Some shortcomings of the DST tool were also reported, and accordingly, suggestions were made by the participants and the researcher as well to improve the use of DST as a reflection tool in teacher education.

Keywords: Critical Incident, Digital Storytelling (DST), Narrative Inquiry, Professional Development, Teacher Knowledge, Technological Pedagogical Content Knowledge (TPCK)

ÖZ

Bu çalışma, İngilizce öğretmenlerinin dijital hikaye anlatıcılığının (DHA) kullanımı ile ilgili algılarını, temel olarak mesleki gelişimlerine katkıda bulunmalarında bir yansıma aracı olarak incelemeyi amaçlamaktadır. Mesleki gelişimlerinin bir parçası olarak, öğretmenlerin teknolojik pedagojik içerik bilgilerinin geliştirilmesi de bu araştırmanın araştırdığı önemli sorularından biriydi.

Çalışma nitel bir araştırma olarak tasarlanmıştır. Araştırma, Doğu Akdeniz Üniversitesi (DAÜ) Eğitim Fakültesi İngiliz Dili Eğitimi (İDE) programında doktora adayı olan beş İngilizce öğretmeninin katılımıyla yürütülen bir örnek olay incelemesidir. Araştırmada veri toplama aracı olarak, DHA uygulamasının öncesinde, uygulama sırasında ve sonrasında katılımcılarla belli aralıklarla yapılan üç farklı yarı yapılandırılmış görüşme soruları kullanılmıştır. İkinci veri toplama aracı ise, katılımcılardan dijital hikayelerinde kritik bir olay olarak tanımladıkları bir öğretim olayını, DHA tekniğinin güçlü yanlarını, zayıf yönlerini, söz konusu tekniğin daha iyi uygulaması için yaptıkları önerileri ve DHA tekniğinin başka eğitim ortamlarında nasıl uygulanabileceğine ilişkin yolları ele aldıkları yansıma raporları olmuştur.

Görüşmelerden ve yansıma raporlarından toplanan veriler, araştırma soruları doğrultusunda tematik olarak analiz edilmiştir. Söz konusu analizde, ilk olarak öğretmenlerin dijital öykü olarak seçtikleri ve kritik olay olarak niteledikleri öyküyü seçmelerindeki gerekçeler; ikinci olarak da DHA uygulamasının kendi mesleki gelişimlerine ve teknolojik pedagojik içerik bilgilerinin gelişmesine yaptığı katkılar

not edilmiştir. Seçilen kritik olayların hemen hepsinin katılımcıların meslek hayatlarının ilk yılına ait olduğu, bir katılımcının ise değişen müfredat ve uygulamaya konan yeni öğretim yönteminin yarattığı kaosu 'kritik olay' olarak öyküleştirdiği görülmüştür. Çalışmanın bulguları, katılımcıların DHA uygulamasını bir yansıma aracı olarak oldukça olumlu bir şekilde değerlendirdiklerini ortaya koymuştur. Katılımcıların biri hariç diğerleri DHA kullanımından övgüyle bahsetmişler, bu uygulama sonucunda eleştirel yansımalarında ve teknolojik pedagojik içerik bilgilerinde bazı önemli iyileşmeler olduğunu doğrulamışlardır. DHA aracının eksikliklerine de değinen katılımcılar, DHA'nın öğretmen eğitiminde bir yansıtma aracı olarak kullanımının iyileştirilmesi için çeşitli önerilerde bulunmuşlardır.

Anahtar Kelimeler: Kritik Olay, Dijital Hikaye Anlatımı (DHA), Öyküleyici Araştırma, Mesleki Gelişim, Öğretmen Bilgisi, Teknolojik Pedagojik İçerik Bilgisi.

DEDICATION

To My Beloved Parents

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TABLE OF CONTENTS

LIST OF TABLES

Chapter 1

INTRODUCTION

This introductory chapter provides a brief overview of the background to the study, followed by the problem statement and the aim of the study. Then, research questions and the significance of the study are presented.

1.1 Background to the Study

Teachers' thoughts, knowledge, and beliefs (or 'teacher cognition', as labelled by Borg, 2003) are the primary concerns in understanding language teachers' classroom practices. There are a number of sources which shape a teacher's cognition. One source is teachers' prior language learning experiences as learners, or 'apprenticeship of observation' (Lortie, 1975). All prospective teachers of English may have some good or bad experiences in their early school years, and these memories may have shaped their beliefs about the notions of language learning and teaching. Another source is pre-service language teacher education program (with its both theoretical and practical components) that has a strong impact on the prospective teacher's beliefs and conceptualizations of pedagogical issues (Borg, 2005; Cabaroğlu & Roberts, 2000). What they study and practice during the pre-service education program may cause both cognitive and behavioural changes in the prospective teachers. As for the in-service teachers (i.e., the practicing teachers), what influences their cognition most is their own first-hand experiences in their teaching contexts, i.e., their personal practical knowledge (Clandinin, 1986). In the related literature, many studies investigated the changes that occurred in in-service teachers'

understandings, beliefs and practices due to contextual factors ranging from the school climate to classroom facilities, colleagues and learners (Gatbonton, 1999; Golombek & Johnson, 2004; Hayes, 2005; Mullock, 2006). Some studies argue that teachers' beliefs and attitudes are even more effective than knowledge in framing teacher's behaviour (Griffin & Ohlsson, 2001; Nespor, 1987; Pajares, 1992, all cited in Butler, 2007).

Teacher knowledge, therefore, cannot be limited to theoretical knowledge or content knowledge. There have been many attempts to define what teacher knowledge should include for a strong base and more effective teaching. On contribution of such is the definition of teacher knowledge as a systematically formed knowledge base that contain multiple types of knowledge (Roberts, 1998). Shulman (1987), on the other hand, provides a detailed description of Technical Pedagogical Content Knowledge (TPAK). Shulman (1987) further specified the kinds of knowledge teachers need to have including: content knowledge, general pedagogical knowledge, curriculum knowledge, pedagogical content knowledge, knowledge of learners and their characteristics, knowledge of educational contexts including the classroom, and knowledge of the educational purposes and values.

Since it is not possible to actually see teachers' cognition and all types of their knowledge, some tools need to be used for this purpose. Borg (2009) lists these tool as (a) self-report instruments (questionnaires, tests), (b) verbal commentaries (via different types of interviews, and think-aloud protocols), (c) observation, and (d) reflective writing (journals, autobiographical and retrospective accounts, and concept maps). All of these methodological tools necessitate 'reflection'. This concept (i.e., reflection) comprises a variety of aspects that are interrelated to shape or certify

teachers' beliefs, values and attitudes about teaching. The reflective approach is the one that starts by gathering data about the teaching process to be used by teachers at a later stage for critical reflection about their teaching (Richards & Lockhart, 1994, p. 1). Reflection is a medium that identifies "questions and key elements of a matter that has emerged as significant, then taking one's thoughts into dialogue with oneself and with others" (Jay & Johnson, 2002, p. 76). For such process to be efficient, the teacher needs to have self-direction, problem-solving mechanisms, critical thinking ability, and personal knowledge (Gün, 2010).

The professional reflection can contribute to clear out the uncertainty and reveal the uniqueness of an action, as it is in itself and in-action process (Schön, 1983). Teacher's self and peer reflection not only helps teachers to observe and record what is happening in their teaching process, but also raises their awareness about their own values and beliefs. Thus, "self-awareness and self-observation are the cornerstones of all professional development" (Bailey, Curtis & Nunan, 2001, p. 22).

In order for teachers to be able to effectively look at, inspect and reflect on their teaching, they need to be involved in the process of exploration. One of the ways to explore their teaching is observing their own teaching and trying to verbalize the rationale behind their teaching practices. Another way is observing their own teaching and trying to do the opposite or not to do what they have been doing. Such behaviours allow teachers to question their assumptions and uncover the beliefs that were probably hidden inside of the teacher's perception without knowing that they have possessed them. Furthermore, these reflectional actions can lead teachers to the realization of the genuine feelings about the things they do as teachers with what they value and believe in (Gebhard, 2005).

Reflecting also offers a chance to explore the emotional experience that teachers go through in their teaching. This aspect is generally ignored in the literature of teacher education and professional development, despite the high significance of teachers' emotions in affecting their sense of burnout, and most importantly learners' outcomes (Gaines, Osman, Maddocks, Warner, Freeman, & Schallert, 2019). The awareness that teachers gain from similar experiences fosters teachers' curiosity to explore more about themselves and helps them to become more open to new techniques or procedures in their classrooms to adopt the 'beginner's mind' all over again (Ohata, 2007).

A further and more critical benefit to be gained from reflection is that it gives teachers a chance to find out the way their former experience as learners and teachers has affected their classroom practices, and hence shaped their own beliefs about teaching (Freeman, 1992). In other words, teachers' behaviours are not to be the end target of the reflective behaviour, but it is the attitudes, the awareness, beliefs and values that mostly matter in the end of reflective behaviour.

As mentioned above, one of the techniques to involve teachers in reflective practice is to encourage them to tell their own lived anecdotes, or stories, related to their professional experiences. As Kramp (2003) points out, stories "assist humans to make life experiences meaningful" (p. 107). The stories include events, people, actions/reactions, and emotions; therefore, they are lively narratives of either some 'good' or 'bad' incidents that take place in the classroom. Stories are the main sources for narrative inquiry, a research type in teacher education, defined as "a means of examining the ways in which individuals make sense of their lives within a changing sociohistorical context' (Phinney, 2000, p. 28), a process which is complex,

4

dynamic and individual (Webster & Mertova, 2007). Weber (1993) elaborates that narratives can be successfully invested in education, specifically in teacher education and for pedagogical research purposes. The reason why he considers anecdotes efficient in provoking reflection, which is - as referred earlier - a fundamental process in teacher education and pedagogy, is that anecdotes encompass elements of particularity, universality, theory and practice all at once. Telling anecdotes or stories in its nature elicits questioning and thoughtful reflection. Furthermore, stories, especially when it is an illustrative one, allows for knowledge base in teacher education to be d and synthesized. The retelling of a personal story evokes 'life material' which is simultaneously used for the sake of knowledge sharing and as basis for reflection (Weber, 1993).

Recently, as technology integration has become inevitable in education, teacher professional development seems to have its shares of technology integration as well. In that sense, digital storytelling is considered quite appealing not only for its convenience for average teachers' use, but also because the narrative nature it features, which allows for a more elaborate reflection. In addition, the ability of this technique in demystifying technology makes it an easy-to-approach tool, combining the personal involvement of the user in the storytelling process. This, as a result, can add another advantage in perusing teachers' positive attitudes about technology (Butler, 2007). The intervention of digital storytelling in the process of teacher critical reflection would probably be a feasible blending of technology with education, which would help teachers to reach an understanding of the method of teaching they are adopting and an understanding of their teacher identity as well (Ohata, 2007). This exploratory tool is then an investment of multiple aspects into the process of reflection; that is, technology, narration, and personal-observation.

The medium of digital storytelling is a modern approach to narrative, and it is basically multimodal. Its multimodality comes from the combination of audial narration, musical association, video segmenting, and other visual materials. Digital storytelling has been described as an effective tool when based upon the seven important elements, which are: the narrator's point of view, having a dramatic question, the emotional content, economy (as being short and meaningful), pacing, the gift of the narrator's voice, and an accompanying soundtrack (Lambert, 2013). A simpler approach to digital storytelling is to combine images with a narrated soundtrack that can possibly be accompanied with music (Miller, 2009). The use of this tool has manifested great appeal among teachers and learners. Moreover, DST is usually used as "an effective tool for language learners to communicate emotion and present information to an audience." (Castañeda, 2013, p. 44). The use of digital stories for reflection, therefore, could be very effective if it is used to address and shed light on areas related to previous emotional experience, or to address a change in someone's own beliefs or values.

1.2 Statement of the Problem

Teachers of English constantly face changing demands of their profession. What they do in their classroom is closely related to their beliefs, values and principles. In other words, their choice of teaching techniques, the way they deal with classroom-related problems and their reactions to unexpected classroom events may be the outcome of their beliefs and thoughts. Yet, many teachers may not be aware of the beliefs underlying their performance. To put it more specifically, they may not be able to clearly justify the reasons behind their attitudes and performance. Therefore, they need to be given support to reflect on their performance and become aware of their

teaching philosophy, so that they become more effective teachers, and enhance their professional development process.

On the other hand, the use of digital stories in teacher education is still in its infant stage. Despite the fact that DST has been mainly used for instructional purposes, there are still a few instances where it has been implemented in some studies as a tool for peer-observation among pre-service teachers (Tatli, Uğur & Çakıroğlu, 2018), or as a reflection tool in subjects like Information Technology (Ivala, Gachago, Condy & Chigona, 2014) or scientific subjects. Yet, to the best knowledge of the researcher, there are no studies which have implemented digital storytelling as a tool for reflection in English language teacher education. This shortage of the related literature in the investment of digital stories in teacher education has necessitated this study.

On that account, the use of digital storytelling can be fruitfully invested in the in-service teacher education contexts, to allow personal observation and reflection, which is highly necessary for teachers of English in particular. Due to the shortage in the literature in examining the use of the tool in English teacher education, and finding out about teachers' perceptions and consideration of the tool after they actually use it in their reflection, the study came to examine and somehow contribute to fill that gap in the literature.

1.3 Purpose of the Study

As a result of the above-mentioned problem, the study is targeting the aim of investigating English language teachers' perceptions about the use of digital storytelling as a medium of self-reflection in their professional development, and its

contribution to their technological and pedagogical content knowledge (TPCK). To this end, the current study will provide further inspection of English language teachers' experience in exploiting digital storytelling as a tool of reflection in their professional development process, as well as a tool for improving their TPCK.

Digital stories help teachers to look at their past teaching experience and to inspect the practices they have been doing, allowing them to distinguish between what they thought they were doing (i.e., their beliefs) and what they really did in the classroom, and consequently what they wish to do in the coming stages. Research questions to be answered in this study, therefore, are:

1) What justification has each participant had as regards their choice of stories?

2) What are the participants' perceptions regarding the DST implementation in terms of its use as a tool for:

    i. enhancing reflection for professional development purposes

    ii. improving their technological pedagogical content knowledge (TPCK)

1.4 Significance of the Study

The use of digital storytelling in education is relatively new. Most of the studies reviewed in this research demonstrate the tendency of exploring the digital story as a tool to be used inside the classroom as an instructional aid (Bailey & Yurt, 2017; Dreon, Kerper & Landis 2011; Kim & Lee, 2018; Rahimi & Yadollahi, 2017). Some other studies explored the use of digital stories in teacher education as a tool for peer observation and assessment (e.g., Tatli et al., 2018). This study, therefore, comes to elaborate the use of digital stories in teacher education, the main focus being on reflection for professional development. The current study explores English language

teachers' perspectives about how useful it is to invest digital stories as a tool of self and peer-reflection during their professional development process. The device will be directed towards the participants' emotional experience as teachers of English, and help them further inspect their beliefs and attitudes about the teaching experience they have gone through.

1.5 Definitions of Key Terms

Critical Incidents: Critical incidents are "any unplanned and unanticipated event that occurs during a class, outside class, or during a teacher's career but is vividly remembered" (Farrell, 2015, p. 73). These incidents are very crucial in shaping teachers' identity when considered as part of teachers' reflective practice. Critical incidents also "summarize common emotional experiences, communication difficulties and challenges to pre-existing knowledge" (Brislin et al., 1986, p. 13).

Theoretical Framework: The reference made in this study to the theoretical framework mainly indicates the theory or approach that the participating teachers have based their perception of the specific critical incident on. In other words, it is the theoretical foundation of teachers' interpretation of a certain problem that they faced during their teaching practice. For instance, the critical incident related to students' preferences for teacher's gender (a female teacher instead of a male one) can be interpreted within identity-focused theories in teacher education.

Digital Storytelling: The tool of digital storytelling is defined as a technological advance that "is well positioned to take advantage of user-contributed content and to help teachers overcome some of the obstacles to productively using technology in their classrooms. At its core, digital storytelling allows computer users to become

creative storytellers through the traditional processes of selecting a topic, conducting some research, writing a script, and developing an interesting story. This material is then combined with various types of multimedia, including computer-based graphics, recorded audio, computer-generated text, video clips, and music so that it can be played on a computer, uploaded on a web site, or burned on a DVD" (Robin, 2008, p. 222).

Technical Pedagogical Content Knowledge (TPCK): TPCK is the "basis of effective teaching with technology and requires an understanding of the representation of concepts using technologies; pedagogical techniques that use technologies in constructive ways to teach content; knowledge of what makes concepts difficult or easy to learn and how technology can help redress some of problems that students face; knowledge of students' prior knowledge and theories of epistemology; and knowledge of how technologies can be used to build on existing knowledge and to develop new epistemologies or strengthen old ones" (Koehler & Mishra, 2008, p. 17-18).

1.6 Summary

In this chapter, an overview of the study was provided, starting with an introduction to and a glance at the study's background. Then, the problem was stated, and the aim of the study and research questions were presented. The chapter ended with reporting the significance of the study. In the following chapter, the literature related to the study will be reviewed.

Chapter 2

LITERATURE REVIEW

This chapter presents an overview of professional development in English language teaching field, including forms of professional development, and the effectiveness of these forms in ELT. Next, the chapter reviewed knowledge of Language teaching. Then, it provides a review of the literature on the reflection for professional development purposes and the narrative inquiry in teacher education. It finally elaborates on digital storytelling and how it can be invested in the educational settings as a tool serving different purposes. The chapter concludes by referring to some related studies in the literature.

2.1 Knowledgebase of Language Teaching

The question of what language teachers need to know and what skills they should have in order to teach language learners effectively has been a concern of teacher educators since the 1970s. Until then, it was thought that being proficient in the target language and having knowledge about its linguistic peculiarities such as phonology, morphology and syntax would be sufficient for teaching it. The pedagogical aspect of teaching was given separately, expecting that teachers would combine their knowledge of content and pedagogy on the job (Freeman & Johnson, 1998).

In the 1980s, there was a shift of attention "from what teachers should know to who they are, what they already know, and what they actually do when they teach"

(Graves, 2009, p. 117). Teachers' beliefs and personal theories about teaching were considered significant in understanding and improving their teaching. Since 1990s, teachers' engagement in reflective teaching has been seen vital for effective practices of teaching. Considering these shifts in understandings about effective teaching, many definitions have been provided to frame teachers' knowledge. One example is the definition given by Roberts (1998), who describes teacher knowledge as a system of knowledge bases, which can be categorized into different types of knowledge. These include content knowledge, general pedagogic knowledge, pedagogic content knowledge, curricular knowledge, and contextual knowledge. These kinds of teacher knowledge have been referred to earlier by Shulman (1987), who categorized teachers' knowledge as: (1) content knowledge; (2) general pedagogical knowledge, which encompasses the principles and strategies of classroom management and organization; (3) curriculum knowledge, which comprises of the materials and programs; (4) pedagogical content knowledge; (5) knowledge of learners and their characteristics; (6) knowledge of educational contexts including the classroom, the governance of school, and the communities; and finally (7) knowledge of the educational purposes and values.

According to Shulman (1987), pedagogical content knowledge (PCK) has a pivotal role as it includes the most important elements of teacher knowledge. This kind of knowledge identifies how certain topics are being organized, adapted and then delivered to meet different learners' needs and capacities. Thus, it includes understanding of the material, learners and their needs, and the instruction itself.

Similarly, Roberts (1998) differentiates between teachers' basic and analytical knowledge of the target language systems, *content knowledge*, the knowledge of

classroom management and assessment skills, *general pedagogic knowledge* and *pedagogic content knowledge*, which includes teachers knowledge and awareness of crucial aspects of languages for learning, the activities to be used in the instructional process and a selective knowledge of what to be taught. Other categories that were also referred to by Roberts (1993) are the *curricular knowledge* which is related to knowledge of materials and examinations, c*ontextual knowledge* which is related to learners, schools and the wider context, and finally the *process knowledge* which refers to the skills related to teacher development, such as interpersonal and team skills, observation and inquiry skills, and language analysis skills.

Having the PCK first introduced by Shulman (1986), Pierson (2001) continues the investigation by linking teaching abilities with technology-use abilities, or the technological pedagogical content knowledge (TPCK), which focuses on how teachers can use technology in their preservice education, while-service education, and during their in-service instruction inside the classroom. It is undeniable that Pierson's (2001) framework overlaps with Shulman's (1986) in emphasizing the importance of combining content and pedagogy into teacher education; yet, it adds the technology knowledge as another crucial element that should be also considered inseparable component of modern teacher knowledge.

TPCK have attracted greater attention in latter studies as it was linked to classroom use. For instance, Mishra and Koehler (2007) detailed the different components of TPCK when used in classrooms. They pointed out that this kind of knowledge requires teachers to have an extensive comprehension of the ways to represent information through technology, considering the importance of technology as the base for effective teaching. Moreover, teachers should develop knowledge about the

technology as a pedagogical technique for delivering the subject-matter. Another component is the knowledge of ways to use technology to address some of the problems students face. Additionally, they referred to the knowledge about theories and knowledge that students previously have, and finally the knowledge of using technology to scaffold new knowledge of students or backbone an old one.

Roberts (1993) also referred to the importance of combining teacher knowledge with expertise to perform the reflection needed to teaching routines. As Roberts (1993) emphasized, not all these routines are principled, and some might be 'rituals' that are done just because it is known to be done this way, regardless whether there is a principle behind this routine or not. Therefore, teachers may employ the reflective aspect of their expertise by depending on all the other types of knowledge while critically analysing their teaching behaviours and solving their teaching problems.

2.2 English Language Teachers' Professional Development (PD)

The word development, in general, refers to growth in certain ways. When connected to profession, it refers to a deeper understanding of the profession through a long-term process, leading to self-awareness and understanding. It is then a bottom-up process that is used as the grounds for reflective review (Richards & Farrell, 2005).

2.2.1 Effective Professional Development in English Language Teaching (ELT)

The field of ELT is constantly changing as a result of several factors such as globalization and the increasing interest in the new 'Englishes'. As a consequent, modern and more sophisticated forms of teaching are necessary to attain to students' skills and abilities. The end results of learner outcomes are not only aiming at their linguistic and communicative skills. Competencies such as mastery of critical thinking, complex problem-solving, effective collaboration, and self-direction are

some of the skills teachers seek to develop in students. Thus, effective professional development is needed to help teachers learn the pedagogies, theories and techniques needed to teach these skills (Darling-Hammond, Hyler, & Gardner, 2017). Different contexts of the ELT classrooms necessitate some personal efforts from teachers as autonomous professionals, and consequently, having the critical mind-set and the ability to take responsibility of their own learning and teaching practices. However, this is only one side of teacher professional development process that teachers engage in. The other side of the process is finding the right way to invest this kind of examination and reach the intended mind-set.

The need for PD is sometimes posed under questioning with the allegement that pre-service formal education actually equips teachers with the required skills. A good response to that statement is that teaching is constantly changing due to its dynamic nature, making teachers obliged to cope up with the fast pace of change, locally and globally (Solak, 2016). There are other benefits gained by involving in professional development programs. For example, they strengthen the way of teaching, questioning one's teaching, gaining self-confidence, engaging in teaching, sharing, influencing, cooperating, affecting others, being active, improving both teacher's and students' performance, adding to the existing, updating and being informed with new trends in the field (Solak, 2016).

Many studies came in support of the impact of PD on teachers' growth. For instance, Borg (2018) provided a practical grounded analysis of the impact that professional development can have on teachers' growth, and how to best evaluate this impact. Borg (2018) raises a central question of what, who, when and how can professional development make a difference, and based his study on examples from the PD in

ELT to evaluate this impact, which will provide further insight to what is effective in terms of professional development and shaping broader understanding and formative decision-making. Findings of the study report that the impact of professional development reaches different levels of the educational entity, namely learners, teachers and organizations from the perspectives of cognitive, affective and behavioural outcomes. Additionally, teacher professional development (TPD) is reported to have a direct impact on students' achievement.

Professional development addresses all aspects of teachers' identity, featuring their theoretical, pedagogical, technical and emotional aspects. These can be seen in the strategies that cluster around reflective practice, such as peer observation, teachers' support groups, and peer/coach monitoring (Wyatt & Ončevska Ager, 2016). On the other hand, recent forms of teacher professional development do not only meet teachers' interests and needs, they further allow them to take charge of their own professional learning. This autonomy includes bottom-up activities and top-down forms, as well. As teachers decide which article to read or which conference to attend, they perform independence and ensure that they will directly address their needs (Borg, 2015).

In the related literature, there are some studies which chose to shed the light on one or two forms of the professional development, in an attempt to highlight the greater benefits teachers can have from these forms, and to raise the educators' awareness and knowledge about these specific forms. Such references are the ones presented by Amzat and Valdez (2017) and Macalister (2018). Amzat and Valdez (2017) suggested that positive changes in teaching practices can be promoted by the collaborative gathering of teachers, allowing them to discuss principles and insights

about their teaching strategies. These Professional Learning Communities (PLC) are good contexts for sharing and experimenting new ideas and reflecting on them. In the same vein, Macalister's (2018) study, a reference was made to the effectiveness of reading journals as a form of PD. This study involved 465 English language teachers from the Asia-Pacific region and examined the role of journals in ELT teachers' professional development. The results showed that almost 80% of the respondents read at least an article in the corresponding year. Findings also pointed out the academic and teaching purposes as the main drive behind teachers' willingness to read journal articles.

The effectiveness of professional development, in order to be appreciated by professionals, needs to be recognized in the first place. The literature has many examples of studies aiming at investigating teachers' attitudes towards such activities. For example, in Endress's (2018) study, an overview of the effective forms of professional development was reflected on by retired educators who worked with teachers of English language learners (ELLs) as well as the ELLs themselves. Firstly, the results revealed a need to recognize the impact of PD activities on both students' learning and educators' professional improvement. It was also confirmed that face-to-face and job-embedded learning are the most effective forms of activities that actually helped teachers to grow professionally.

English language teachers specifically need to participate in different forms of professional development to respond to the rapidly changing contexts in contemporary educational systems. This has been highlighted in several studies such as Takayama (2015), Snow-Perry (2018), Reyes (2017), Nelson (2018), and Frahm (2018). For example, Takayama (2015) investigated the way non-native teachers of

English in a Japanese context can improve their identity and efficacy through different perspectives including professional development. Teachers' perceptions seemed to emphasize the high correlation between teachers' efficacy and their self-perceived English proficiency. In a more recent study, Snow-Perry (2018) offered some insights into teachers' perceptions towards effective professional development forms. The investigation aimed to find out whether teachers believed that the professional development they received actually contributed to their ability to alter their instructional practices to address the expected standards. As reported in the study, the forms such as seminars, conferences, job-embedded training and professional communities were found to be effective.

Reyes' (2017) study, on the other hand, explored teachers' perceptions in relation to providing feedback on English language learners' writings. These perceptions were mainly focused on how to create better teachers and better professional development. In a similar study, Nelson (2018) elaborated on the need for more professional development programs to be embedded in the teachers' background. The study was carried out in rural Mississippi school, where English language learners (ELLs) were not performing as well as the non-ELLs. There have been several reasons attributed to the problem, but the lack of sufficient professional development program was listed as one of the factors. Frahm (2018) also highlighted the importance of PD program, focusing on how an intensive professional development program can influence teachers as writers in general, and specifically their instruction in classroom.

Some other studies (Alfaki, 2014; Hartono, 2016) aimed to shed the light on teachers' perceptions of the effectiveness of the professional development in English

language teaching, after imparting a professional development program. The study conducted by Alfaki (2014) demonstrated different aspects of ELT professional development to find out the best opportunities and activities available in the context. Data collected through surveys revealed that teachers count themselves and also the governments responsible for creating these professional development opportunities.

Hartono's (2016) study investigated EFL teachers' perceptions of the professional development experience in the context of Indonesia, regarding reasons, importance, and impact of the professional development. Findings showed that EFL teachers in Indonesia were more concerned with the pedagogical practice within the professional development program.

In another study, Zhang (2014) investigated the impact of a professional development program through a mixed methods design. Findings of the research reported teachers' satisfaction with the intervention of the program, as it caused noticeable development in their knowledge, beliefs and skills.

Needs of EFL teachers in professional development are also as crucial as their perceptions of the importance of the professional development programs, as these needs play a pivotal role in motivating teachers to be involved in a professional development program in the first place. The study of Lee (2016) investigated such needs of the EFL teachers in South Korea. The study was conducted on both native and non-native speakers of English to gather their perceptions of the effectiveness of the professional development programs available in South Korea. Similarly, Zein (2017) also investigated the needs of primary EFL teachers with regards to professional development, highlighting the importance of having a model of needs-

based PD. The study included the opinions of both primary teachers and teacher educators.

On the other hand, the experience of teacher professional development itself has gone under inspection to raise teachers' awareness about their previous and current practices in the teaching experience. To exemplify, the research of Arkhipenka (2017) was qualitatively designed to explore the PD experience of teachers who were part of an MA TESOL programs. The investigation was carried out through in-depth individual interviews where teachers elaborated on the benefits gained and the way they were developing professionally during the year of MA. The teachers also provided stories about this specific year as well. These stories provided a sample for what professional development programs can imply. The teachers made some suggestions for future use of these stories to develop professionally, as well.

To conclude, there has been a great deal of other studies like Bleistein (2013), Desimone (2009), Molle (2010), Shea (2012), Torres (2013), and Zafar (2012), which focused on the professional development of the English teachers in different contexts. All these studies presented some substantial findings in the literature, in the favour of the implementation of PD programs to increase teachers' knowledge and enhance their skills.

2.3 Reflection for PD Purposes

Each teacher comes to class with his/her own firm philosophy about teaching. This philosophy does not only shape the frame of their classroom practices, but extends to reach all aspects of the educational process, ranging from beliefs about the role of teachers in classroom and ending with the simplest principles of what techniques are

most effective in the classroom. In other words, teachers' philosophy encompasses both the pedagogical and the practical knowledge. Due to the importance of teachers' beliefs, attitudes, and cognitions towards their own teaching as they directly affect learners' outcomes, these have been given some considerable attention in the related research (Borg, 2015). The significance of reflection has been voiced by many researchers. According to Edge (1991), for example, teachers can take the responsibility of their professional growth by adopting a reflective approach in their teaching process. They will be able to initiate, invest and explore their teaching, and lead to deeper involvement into the process of teaching as they critically analyse their own experience. This active participation in their development will, hence, give them more confidence in future evaluation or critical judgements of others.

Teachers' beliefs and practices reflect the basis of education and experience they have been involved in. Teacher education and development, as a result, aims at teacher growth in terms of their knowledge and skills, including content knowledge, which refers to teachers' knowledge about the target language, and pedagogical content knowledge, which is the knowledge that integrates subject-matter (i.e., the language) with knowledge of students' learning and pedagogy (Roberts, 1998).

The framing of that knowledge into teachers' inventory cannot be only obtained through a linear process of learning. Teachers need to be critically and dynamically involved into their knowledge shaping through experimenting and reflection. Some of the studies that analysed reflection in teacher development include Argyris and Schön (1974), Dewey (1910), Eraut (1994), and Schön (1983) among many others. Dewey (1910), for instance, defined reflection as "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the

grounds that support it, and the further conclusions to which it tends" (p. 6). Dewey further elaborated on the importance of the 'reflective thought' which occurs when teachers are faced with a surprise or dilemma that provoke their analytic thinking. Teachers in these cases go through a cycle of reflection starting with the feeling of difficulty, leading to critical observation for the sake of resolving the dilemma, then moving to suggestions for solutions, analysing the implications of these solutions, and ending the cycle by re-observing of the new implemented procedure. Thus, teachers create their own teaching theories. It is the success or failure of these new theories that shape teachers' knowledge. This notion of reflection, as Dewey (1910) stated, liberates teachers from the mono perspective about an issue to a more poly perspective, in which he also uses the term 'reframing' to refer to the process of addressing a single problem with different ways through reflection.

Schön (1983) had a very similar approach of reflection to that presented by Dewey. However, Schön mainly considered the ability for instant and creative problem-solving of situations as the core of professional expertise. Schön, thus, distinguished between 'reflection-on-action' and 'reflection-in-action', in which the first refers to the reflection that occurs after the event, while the second refers to the kind of reflection that happens during the event, where teachers can still make an instant and conscious decision. This rapid approach of problem-solving, or reflection-in-action, is what Schön (1983) considered to be more effective in teachers' professional development.

The reason professional reflection approach has received this great deal of attention is due to its role in addressing the uncertainty that teachers might face and allowing them to explore different aspects of a given dilemma (Shön, 1983). Reflection

approach also contributes to raising teachers' awareness about their own beliefs, excavating teachers' emotional experiences, and increasing teachers' curiosity to explore and implement new theories or procedures in their teaching process (Ohata, 2007). Ohata explained that reflection should be conducted with 'a beginner's mind', i.e., holding no prior judgements. Ohata (2007) used the term 'liberating tool' to describe the idea of exploration that teachers might go through by trying new things they have never tried before (or stop doing things the teacher used to do frequently) just to check what might happen as a result. This exploration is stated to lead sometimes to small changes in the way we teach. These procedures will eventually help teachers explore their teaching, and hence, leading to potential advantage in the learning process itself, as well as the teaching practices of these teachers.

Freeman (1989) differentiated between the change that happens in the 'training' phase and the one that occurs in the 'development' approach. While the first one aims to make a behavioural alteration, the second type involves changes in the attitudes, awareness and understanding of the classroom practices. Therefore, the ultimate result to be sought from teacher reflection as a developmental process is to describe and understand "what we are now by reflecting on how we got to be here" (Bailey, Curtis, & Nunan, 2001, p. 247).

Capturing sufficient understandings of learners' experiences as well as boosting teachers' enthusiasm to the teaching process are some of the plenty benefits for engaging in professional reflection (Wyatt & Ončevska Ager, 2016). The researchers added that in order to achieve a noticeable 'transformative growth' through reflection, learning should have collaborative, conversational, activity-cantered traits and methods, such as self-observation, video-stimulated recall, action research and

exploratory practice, which are mainly bottom-up approaches of professional development. Similarly, the case study carried out by Ebadi and Gheisari (2016) on an Iranian EFL teacher, provided an in-action evidence on the benefits of teacher's reflection as part of the teacher's professional growth. Benefits such as awareness-raising and critical thinking and reflection were reported as new skills that the teacher was capable of using.

The study of Celozzi (2017) prevailed the reflective practices of teachers through the professional development training. Findings revealed the effectiveness of professional development programs in providing teachers with better knowledge to respond to learners needs. Moreover, their reflective process contributed to further of teachers' planning skills, problem-solving, and assessment practices. In another study by Cornelius (2018), which aimed to find out whether professional development programs facilitated the adult learning principles, it was reported that teachers' skills were actually improved and new strategies were learnt through the professional development program. Similar findings were reported in Körkkö, Kyrö-Ämmälä and Turunen's (2016) studies, where the findings confirmed the development of teachers' practical theories and reflection, which positively had an impact their professional development and their knowledge in general.

2.3.1 Critical Incidents

Teacher reflective practice can be performed on different occasions and situations, one of which is the critical incidents. Critical incidents are defined as "an unplanned and unanticipated event that occurs during a lesson and that serves to trigger insights about some aspects of teaching and learning" (Richards, 2005, p. 113). Similarly, Brookfield (1990) defined critical incidents to be events that are lively remembered, but he included events occurring both inside and outside the class that might affect

the teacher's perceptions and beliefs. However, an incident is not considered critical until the teacher decides to stop and think about the event. In other words, it is the review of the incident and the critical reflection that the teacher put on a certain event, behaviours or outcome that makes it critical. Thus, the value of critical incidents basically comes from how it is conceived and the effects it had on teachers understanding of teaching, themselves, and their learners. Reflective inquiry, however, is not the only benefit to be gained from exploring critical incidents. Other advantages have been also attributed to the process, for instance it helps to identify and solve the exiting problem, recognize a good practice, boosts teachers' professional awareness, sharing expertise and building up collegiality (Richards, 2005).

Critical incidents usually provoke teachers to stop and think about what they have been doing in their classroom, unveil a hidden meaning of a certain behaviours or even consider their already existing beliefs and principles. Despite the fact that these incidents mainly occur during the classroom instruction, they might also take place outside the classroom (Farrell, 2015). As long as the event cause a notable change in teachers' professional perception and cognition, it does not matter whether the incident is classroom specific or not. For instance, a teacher might face a certain situation with the school administration that put him/her through an emotional experience or communication challenge provoking critical thinking and resulting with a change in his/her career path or certain teaching principle. Another distinction between different kinds of critical incidents was made by Thiel (1999, as cited in Richards, 2005). Incidents could have positive or negative impacts on teacher as they take place. They can be described either 'teaching high' if they had a positive impact on the lesson, or 'teacher low' if they demonstrated a problem or a negative

behaviour. In either case, an analysis of the event would lead to a better understanding of the event whether to boost it, solve it, or avoid it.

Analysing critical incidents requires documentation and reflection. In order for teachers to do that they need to initially ask themselves why is the incident significant, what happened before the incident, what happened after, what is their interpretation of it, what are their assumptions about their teaching that promote the incident, and how would they react if the incident happened to them again (Richards & Farrell, 2005). By analysing a critical incident teachers can gain a great deal of benefits that would contribute to their professional development. Richards (2005) listed some of these benefits including improving their level of self-awareness, encouraging teachers to pose critical questions about their teaching, becoming aware of their own beliefs, creating opportunities for action research, providing a source for other teachers, and contributes to building up a community of critical teachers. The last of these benefits has received a great appeal in the literature (For example, Farrel1, 2013; Farrell, 2015; and Richards, 2005). The importance of dialogue in the reflective practice is highlighted by Kumaravadivelu (2012), who noted that the collaborative process among teachers actually encourage reflection and critical dialogue. This can be performed through having a critical friend, or allowing for peer observation and collaboration among teachers.

In order for teachers to analyse a certain incident efficiently, two stages have been suggested by Tripp (1993) to analyse and understand a critical incidents. Teachers need first to describe the critical incident, then they need to explain the meaning of that incident by attributing to answer the questions of what happened and why it happened. In the same vein, some processes have been suggested to provide a model

for teachers to follow during their critical incident analysis. One example is the model provided by Brookfield (1995), which utilizes having a critical friend, a peer, or a group of teachers during the reflection and analysis stages. In this process, teachers need to tell a story about the critical incident that happened, describing what happened. Then, the group of teachers can ask questions to find out why it happened and what it might mean. This would lead the teacher to find the implications for the practice, and in the end the whole group including the teacher can debrief the process. Brookfield (1995) also suggested another critical incident analysis process involving students and utilizing their responses to questionnaires. Thiel (1999, as cited in Richards, 2005), on the other hand, proposed four steps to be followed when reporting a critical incident. These steps start with self-observation on the event, moving to description of what happened, then reaching self-awareness, and finally self-evaluation. Such reports can be utilized in different ways; for example, they can be used to promote discussions and review among teachers' groups, or can be used as resource for novice teachers and training courses.

Using critical incidents for personal reflection and use can carry some substantial benefits beneath. Teachers can examine their beliefs and refer back to them when faced with similar incidents. However, sharing these incidents as personal stories with other teacher have a great value in teachers' discussion on ways to develop their understanding, their teaching and themselves as well. Therefore, Freeman (1996) noted that "you have to know the story in order to tell the story" (p. 89). The implication of Freeman's quote is that teachers need to well know their own stories, they need to ask themselves the right questions, and understand the meaning of an incident before telling it to others. Thus, it was suggested in some studies to

implement critical reflection on personal stories in teacher coaching and training programs (Griffin, 2003).

2.4 Narrative Inquiry in Teacher Education

From the extensive field of qualitative research, narrative inquiry emerged as an analysis tool focusing on the examination of the knowledge rather than collecting data, considering that any knowledge is noteworthy regardless of the number of people that have this knowledge. Despite the existence of narrative inquiry as an old practice, what makes it relatively new is the use of narrative inquiry as a kind of data collection and analysis methodology in the research of social sciences (Clandinin, 2006).

Some salient definitions were provided to clarify the essence of narrative inquiry in the literature. For example, Clandinin and Connelly (2000) define narrative inquiry as a form of collaboration between the scholar and the participants to reach a further comprehension of a certain experience. Building upon this definition, they specify three basic aspects to consider narrative inquiry as a methodology. These aspects are the personal and social interaction, the time, and the place. The aspects were in fact mirroring the dimensions of Dewey's criteria in his theory of experience: interaction, continuity and situation (Dewey, 1983). Barkhuizen (2007), in his study, also made a reference to these three aspects and identified them as the three levels of story which can be specifically applied to the lives of English teachers. The aim of the study was to make teachers more aware of their own teaching contexts because "context is crucial to meaning making" (Phillion & Connelly, 2004, p. 460).

In light of the above statements, it is inferred that the experience of a participant needs to be examined in the sphere where it basically existed in. Narrative inquiry, therefore, searches for methods to alter and modify that very specific experience of the individual himself/herself and others who might be concerned, in a way or another, with the experience.

The narrative analysis, on the other hand, investigates narratives or stories as a whole, rather than fragmented categories, as it is the case with other forms of analysis. In other words, the content, the structure and the context, in addition to other story elements are all considered at once (Wells, 2011). In this regard, Weber (1993) also inspected the use of narrative anecdotes in teacher education focusing on two main purposes: firstly, to pose some essential questions about the use of narrative in teacher education, and secondly to shed the light on one specific form of the narrative, the anecdote, in serving the pedagogical research, theorizing and teaching. The writer further elaborated that anecdotes promote reflection in the research process, leading to questioning that is also a form of pedagogical theorizing. Thus, "the discerning use of the narrative is one way in which we can construct and assimilate our knowledge base in teacher education" (p. 71).

A recent attention has been given by researchers to the narrative turn in the TESOL and applied linguistics, where stories are used to allow teachers and learners make use of their experiences (Barkhuizen, 2016). The reasons that these stories are considered highly effective in this context are attributed to several factors. One factor is the intuitive appeal of the stories, away from the quantitative approaches. Another factor is the need for more qualitative approach tools to be adopted by the educational research, due to the fact that social and educational research is

29

fundamentally different from natural scientific research. Moreover, stories being a way for participants expressing their own identities provide some chances for the researcher to comprehend the participants' perception of their own activities. If implemented properly, the narrative inquiry will open channels for teachers to explore their cognition about the experience and the feelings hidden behind them. This exploration will enrich them, and most probably, allow them to transform some of their former beliefs or classroom behaviours (Barkhuizen, 2016).

The value of the narrative inquiry in language teacher education has been greatly supported for another crucial reason. In addition to the aspects referred to above, Barkhuizen (2007) listed, in his earlier studies, even greater and more meaningful impacts of the narrative inquiry. A leading aspect is the reflective inquiry that is embedded in the process of narrative inquiry, allowing teachers to reflect on their teaching practices as they try to construct their stories, and later analyse and interpret them. This process of interrogation consequently leads to the meaning making, in which teachers reach a better understanding of the change they are targeting. Moreover, the interpretation of teacher's own stories creates a practical knowledge, which is essential for their future informed decisions; making the narrative inquiry a contextualized and personalized inquiry because teachers create their stories right from the heart of their experience.

2.5 Digital Storytelling as an Educational Tool

Digital Storytelling (DST) is one of the recent powerful tools that has been invested in the field of education. Originally, the digital stories were defined as a short audio-visual clip, which encompasses voice-over narrative and/or other audio tracks along with photographs and (sometimes) other embedded video segments (Lambert, 2009).

Lambert (2009) provides seven elements of effective digital stories. These include i) a point of view, ii) a dramatic question, iii) emotional content, iv) economy, v) pacing, vi) the gift of the narrator's voice, and vii) a soundtrack. By combining these elements, one can use the digital storytelling for a variety of functions, depending on the role that the user fulfils. For instance, it can be used by an intending employee to present their résumé in a more lively way, or by a presenter in a seminar as an initial display of the topic. In the field of education, the DST has been more popular among students, and were mainly given by teachers as a task to help students expresses themselves freely in the class, enabling them to connect their past, present and future status. However, recently, there is an increased interest into investing DSTs into the field of teacher education and professional development, such as the studies of Ivala et al. (2014), Marone (2017), Sancar-Tokmak et al. (2015), and Tatli et al. (2018). The use of stories in these domains is becoming more frequent due to their dynamic nature, therapeutic effect, preservation of cultural heritage, community development and its ability to smoothly translate knowledge into a more comprehendible form (de Jager, Fogarty & Tewson, 2017). In this respect StoryCenter (2017) refers to the intimacy appeal that stories have, which allows for people to connect to each other, and hence giving a deeper attention to the presented case. Moreover, stories have the power to change and attribute to social justice: "When we listen deeply, and tell stories, we build a just and healthy world" (StoryCenter, 2017).

Similar remarks have been made earlier by White and Epston (1990), who concluded that stories are not only used for entertainment and educational purposes, but rather they depict the way we vision our own living and lead to shaping our lives sometimes. As a result, stories are being greatly used recently in different educational, social and academic disciplines and through different forms: oral,

written and digitalized (For instance, Barkhuizen, 2016; de Jager et al., 2017; Lee et al., 2013; and Schatz-Oppenheimer et al., 2014). Moreover, some studies have been dedicated to draw on the great effect of stories on both teaching and learning. For instance, the study of Nathanson (2006) presented a review on the way stories can be used to improve learning and teaching. It was reported that stories were quite attractive for readers as they were able to build some personal connections, and hence, lead to better understanding of the subject-matter.

Digital stories, on the other hand, have elevated the effect of storytelling as they invest the element of technology. DSTs are dynamic stories that allow for personalization and are customizable, which is the reason they are usually described as "user-contributed content" (Robin, 2008, p. 222). These new features add the element of surprise to traditional stories, which is quite appealing for all types of learners as they entertain, involve socializing and educate simultaneously (Robin, 2008). The use of digital storytelling in education, therefore, provides the chance for teachers to utilize technology in classrooms in prevailing problems and being creative. Robin (2008) elaborates that through incorporating different forms of multimedia ranging from graphics to record audio or links of websites, DSTs enable teachers not only to create stories and use them as classroom materials, but further they demystify conducting research and developing their professional skills. Other researchers have found that students involvement and understanding of the course is promoted by combining images with written texts (Burmark, 2004), which makes digital stories a perfect medium that facilitates learning and comprehension. Additionally, other benefits that can be attributed to integrating DSTs into the educational environment include facilitating students' discussions, lubricate abstract information, and hook the viewer/listener's attention when given as an inception to

the lesson. One greater advantage of the digital storytelling experience for students is that it teaches them to be critical to their own work and their peers as well, which leads to improving their emotional experience (Robin, 2008).

Since these tools and software that bring in the digital stories into action are becoming more affordable and accessible day by day, the educational reliance on DST has drastically increased as well. As a result, the uses of DSTs have varied accordingly, and as Schrum et al. (2007) noted, "that different technologies do have unique pedagogical affordances and that the effects of these affordances can only be understood in the context of a specific content area (and related learning outcomes) and a specific pedagogy" (p. 3). Some of the trending uses of digital stories is its use as personal narratives, where the narrator tells a personal story. The content of this type of stories can be an event, an incident, or an experience that are potentially meaningful also for the listener. Another type of these stories is the one that is used as a model to instruct and present information on specific subject-matters. A third use of digital stories is to exhibit historical events through photographs, public speech, news, or even a segment, which involve students socially and emotionally in the event (Robin, 2008).

Since digital stories have the emotional element, it is important to improve learners' digital empathy when considering digital storytelling in education. In the study of Chen (2018), digital empathy was defined as the "cognitive and emotional ability to be reflective and socially responsible while strategically using digital media" (p. 50). The study emphasizes the need to educate learners about this empathy. Learners' empathy is essential due to their great dependency on the digital devices and the high chances of encountering situations where they can depend on that empathy. For this

purpose, the study implemented video production process. The findings of the study reported positive results in raising students' awareness and encouraging them to have online empathy. The videos, as the participants reported, have given them the opportunity to inspect their online practices. Additionally, for a technology native generation, digital empathy teaching was also an outlet for starting to educate learners about some crucial social issues. This idea was explained by Friesem (2016) with those words: "digital empathy seeks to expand our thinking about traditional empathy phenomena into the digital arena" (p. 24).

Nevertheless, integrating digital storytelling into the educational process is not limited to classroom practices and improving learners' outcomes solely. Recently, it has been used in higher education classrooms and teacher professional development programs. Hicks (2006) declared that paying much attention to the technical knowledge should be considered by teacher education programs. Thus, teachers can employ their TPCK in the classroom by using digital storytelling. Hicks (2006) elaborated that "the ability to think about and use technology in critical, creative, and responsible ways—will then develop and enhance TPCK" (p. 50). Thus far, digital storytelling may and will have more important roles in teaching and learning; these roles can be best extracted when digital storytelling as a tool is combined with the theoretical framework of TPCK (Robin, 2008).

2.6 Related Studies

As mentioned above, investing digital storytelling into the educational environment and processes has been grasping a great deal of attention recently. However, and to the best knowledge of the researcher, studies are still scarce in regards with the use of DST in teacher education and PD. Yet, there are some related studies that have

scrutinized and investigated the different aspects and forms that digital stories can be used for in teacher education.

It is worth noting in this vein that there have been some important research papers investigating the effects and benefits of DST when used in a classroom setting. One example of such studies is the one conducted by Aktaş and Yurt (2017). The study examined the effect of digital storytelling as a learning material on the learner's motivation, academic success, retention, and opinion. The mixed-method-mode study was carried out on the students of Recep Tayyip Erdoğan University, Education Faculty, Turkish Education Department. The findings of the study revealed the positive effect of the digital storytelling on the above mentioned elements of the students.

Other relevant studies tackled the use of digital storytelling as a tool for data collection in research. The study of Hung, Hwang and Huang (2012), for instance, depicted the use of DSTs in research methods. The quasi-experimental study, which was conducted on fifth grade students in Taiwan, was applied on a science course to investigate the application of a project-based learning effectively. Results reported positive and effective learning of students as result of combining project-based learning with digital storytelling.

Among the very diverse uses that DST have in the educational field, peer-observation is one of the most benefited areas that have invested digital storytelling. A very recent study of Tatli, Uğur and Çakıroğlu (2018) was conducted on how digital storytelling contributed to the peer assessment experience of the pre-service Information Technology teachers in the Department of Computer Teaching

Technologies Education at a state university in Turkey. The study, which used both qualitative and quantitative data collection tools, revealed the positive attitudes of the pre-service teachers towards the use of DST in their teaching practice as a medium of peer assessment. DST was reported to overcome some of the shortcomings of the traditional means of peer-reviewing such as the anxiety and biased subjective scoring to avoid clashes with the reviewed teachers. Thus, digital storytelling was described to solve such problems. Moreover, the device presented different perspectives and an emotional content through multimedia which increased the value of the review given. The study provided suggestions for future uses of DSTs as an assessment tool for the teaching practices as results reported positive attitudes of the pre-service teachers on the use of DST.

Another experimental research study was carried out on FLE pre-service teachers enrolled in a computer course (Sancar-Tokmak & Yanpar-Yelken, 2015). The aim of the study was to examine the effect of making a digital storytelling on teachers' self-confidence in their pre-service training experience. Again, the study revealed a considerable increase in the pre-service teachers' confidence after the creation of the digital story.

Another way that DSTs have been invested in teacher education is as a tool of reflection. In the study of Marone (2017), digital storytelling was experimentally used in teacher education for the purpose of reflection. The study was conducted with eighty student-teachers enrolled in training programs for the achievement of the professional teaching qualification in an Italian university. In this study DST was used as an instrument for teacher training. The aim was for teachers to consider the

use of information and communication technologies cognitively and reflexively to address pedagogical issues.

Another prominent study in employing DSTs as tools of reflection is the study of Ivala, Gachago, Condy and Chigona (2014), which aimed at testing the possibility of using the digital storytelling to encourage teachers' reflection. The study was conducted on 29 final-year pre-service student teachers at the Cape Peninsula University of Technology (CPUT), South Africa. Findings of the study showed that although only half of the students volunteered to do the digital storytelling form of assessment, both staff and students confirmed high level of reflection. This consequently led to deeper learning and understanding of the subject matter and practices for teaching that subject.

Additionally, the literature has provided some studies investigating what effects and uses DSTs can employ, when invested in an educational setting. For instance, the review study of de Jager, Fogarty, Tewson, Lenette, and Boydell (2017) claimed that there has not been much research on the investment of DST in research capacity for information investigation and generation, the thing that necessitated their review paper. As a result, the study has elaborated on DST in research. It has been concluded that digital stories were especially appropriate with the 'marginalized' groups of participants, who found resort in using such a tool to freely express themselves. Additionally, several other benefits have been reported on behalf of DSTs, outweighing the disadvantages that have also been attributed to them. A striking finding was that despite the effectiveness of DSTs in providing a ready-made knowledge translation product, it was scarcely used in research projects.

A thorough inspection of the literature can provide some other related studies on the effects, uses and forms that DST can be used in educational contexts; yet, research on the employment of DST tool in teacher education and research is still to be supported.

2.7 Summary

To encapsulate, the literature provided substantial amount of studies on the importance, impact and the trending modes of teacher professional development, considering that change is a natural and inevitable process of all professions, including language teaching. Some of supporting studies were highlighted in this chapter, and followed by a review on the role of reflective inquiry in teacher growth and development, and its use as part of their PD programs. Then, the narrative inquiry was briefly explained, with a reference to its benefits as an inquiry tool in ELT education and PD. Afterwards, an overview is given about the related literature on digital storytelling, and the different contributions it might have if invested in education. Finally, some related studies in the literature were given at the end of the chapter. In the following chapter, a review of the data analysis tools and data analysis procedures is elaborated on.

Chapter 3

METHODOLOGY

This chapter introduces the research design, the context and the participants of the study. It also presents the data collection tools and procedures, as well as data analysis.

3.1 Research Design

This study can be considered a case study designed to investigate the perception of English language teachers about the implementation of the digital storytelling as a tool of reflection for their professional development. To realize this purpose, the study adopted a qualitative approach of research, using interviews and reflection reports as tools of data collection.

3.1.1 Case Study

Case study is defined as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used" (Yin, 1984, p. 23). Dörnyei (2007) goes further to highlight the specific nature of the case study, by stating that it studies the features found within the boundaries of a system or a case. In addition to putting experiences as their cornerstone, case studies consider the influence of these experiences over other aspects in the contexts, which requires careful consideration of the activities included in each case (Stake, 2003). Stake (1995) distinguishes between three different types of case studies: the intrinsic, the instrumental and the multiple (collective) case studies.

39

The first type (the intrinsic case study) refers to a single case of an individual, a group, an organization or any other single body. The intrinsic case study's importance usually comes from its own and not from the potential powers. The second type of case study is the instrumental one, which is also a single case, but this time the aim is to understand a phenomenon of interest that may go further than the case itself. The last type is the collective case study, which is a multiple case form of the instrumental. In this type of case study, learning about a phenomenon is the focal aim. Duff (2006) highlights that the choice of multiple participants in a case study can save the researcher from serious complications in case one or some of the participants decide to discontinue due to attrition. This actually adds to the value of a case study. Additionally, Bell (2014) refers to the appropriateness of case studies if the researchers are working individually, as it allows for one side of the case to be intensively investigated. Therefore, the choice of a case study is dependent on what to be studied as a case, not on the method itself (Stake, 2003). The design of the current study falls into the third category of the above distinction, since the research considers five focal participants, and this makes the study a multiple case study.

3.1.2 The Qualitative Approach

According to Gaudet and Robert (2018), qualitative research design is used to allow a thorough inspection of the meaning especially in social sciences. It usually targets participants' subjective opinions, thoughts and feelings about certain experiences. Some of the most notable characteristics of the qualitative research is that it is fluid in nature. It unfastens a latch for details to be poured out through different means. Thus, it has the flexibility in diverting the route of information flow. Moreover, the nature of data itself that is targeted by the qualitative tools aims to seize complex form of details that can be interpreted in many possible ways, making any piece of

information necessary (Dörnyei, 2007). Other characteristics of qualitative research, as provided by Dörnyei (2007), include the natural setting where the data exist, the insider meaning of the data, the small number of participants due to the intensive scrutiny of information needed in the data collection and analysis, and the interpretive nature of analysis.

In the same vein, according to Bell (2014) researchers adopting this approach aim to comprehend individuals' perceptions of the world' and "they doubt whether social 'facts' exist and question whether a 'scientific' approach can be used when dealing with human beings" (p. 9). Bell further elaborates by suggesting that qualitative research questions start very broadly to narrow down into more focused questions as the study goes on.

Compared to quantitative data which can provide a larger-scale of opinions' inspection, qualitative data, as Dörnyei (2007) claims, can uncover the slight differences in meaning that quantitative approach misses to investigate through the numerical structured data collection. On describing small-scale research, Denscombe (2014) claims that the size and purpose of the project are not its most crucial elements, rather it is the 'rigour' of the research that should be conducted.

As stated above, this study aims to investigate the participants' experience of using digital stories in their professional reflection. For this purpose, it invests interviews and reflection reports. These tools gather data that is qualitative in nature as the inquiry in this study is greatly dependent on the depth of the information rather than the size, the attitudes of the participants, and their further comments and reflection on the whole experience of using digital storytelling.

3.2 The Context

The importance of the research context is highlighted by Holliday (2010) when he pointed out that research setting "provides an environment within which to interconnect data" (p. 41). As a result, the setting of the study was chosen to best enhance the research in a suitable environment. The study is conducted with five English language teachers who are also enrolled in the course ELTE 604 Approaches to Teacher Education in the Foreign Language Education (FLE) Department, Faculty of Education, Eastern Mediterranean University (EMU) in Northern Cyprus.

Since its establishment in 1995, the Foreign Language Education (FLE) Department has been taking into account the requirements of contemporary English language teaching through the provision of the relevant professional as well as vocational courses. The department offers an undergraduate program of study, leading to the Bachelor of Arts (B.A.) degree in ELT, a postgraduate program leading to the Master of Arts (M.A.) degree in ELT as well as another postgraduate program leading to the PhD degree in ELT. The student profile of these programs is quite international with students from more than 25 different nationalities and countries such as the UK, Australia, Iran, Iraq, Jordan, Syria, Oman, China, Kazakhstan, Turkmenistan, Nigeria, Russia, etc.

The PhD in ELT program is designed to equip scholars with an advanced knowledge of the background in the theory and practice in English language teaching. Candidates take eight courses, pass a qualifying examination and submit a thesis in order to complete their PhD studies in ELT.

One of the obligatory courses in the PhD program is ELTE 604 Approaches to Teacher Education. The course tackles the approaches in current teacher education programs, and training both prospective teachers and teacher trainers in various aspects of English as a foreign language (EFL) education. The principle aim of the course is studying the issues involved in current teacher education research and development in ELT for primary, secondary, and tertiary levels. The course requires students' full attendance of sessions, commitment to papers and assignments submission, and active participation in the discussions (face-to-face and online) and presentations. The attendees of the course are usually asked to submit three papers on various but relevant issues in language teacher education. One of these papers (when the study was initiated) was the reflection paper on a digital story they were asked to prepare to reflect on a critical incident that they had faced during their teaching experience.

3.3 Participants

The participants involved in this study are all five PhD candidates enrolled in the course ELTE 604 (Approaches o Teacher Education) in the Spring Semester of 2018-2019 academic year. The sampling of the participants was based on convenience sampling due to their availability and accessibility. Additionally, as a researcher I was interested in focusing on teachers' education, and the course 604 included the implementation of continuous critical reflection on issues related to teacher training and education. Since the attendees in this course are asked to go

through some in-depth speculation and multiple reflection processes both in written and oral forms, this created an ideal setting for the study to be carried out in.

All of the participants had prior experience in teaching English as a foreign and/or second language, though in varying lengths. For example, while one participant had only one year of experience, another one had around 17 years of experience. The participants, who are two males and three females, came from different cultural backgrounds and countries such as Jordan, Pakistan, Turkey, Iran and North Cyprus, none of which is an English-speaking country. Their majors and master's degrees ranged between translation, English literature, and linguistics. All of the participants had no prior experience in using digital storytelling neither in their teaching nor in their previous education. Table 3.1 below depicts the demographic data of the participants. They were given pseudonyms in order to keep their identity confidential.

Table 3.1: Participants' Demographic Data

Participants	Sex	Nationality	Age	Years of Teaching Experience
Merve	Female	Turkish	26	1
Ayşe	Female	Turkish Cypriot	26	3
Darius	Male	Iranian	27	9
Zahid	Male	Pakistani	54	17
Noor	Female	Jordanian	25	3

3.4 Data Collection Tools and Procedures

This study invested two instruments for data collection, namely the semi-structured interviews and the reflection reports.

3.4.1 Semi-Structured Interview

Interview is the most frequently used form of data collection in qualitative research. Crabtre and Miller (1999) refer to interviews as one form of common social communication; this technique can be used as a research instrument utilizing the qualities of such interaction including turn-taking, and sharing cultural and common knowledge between the interviewer and the interviewee. Additionally, Block (2000) claims that during interviews participants feel that they are engaged in a form of social interaction, allowing for easier flow of the discussion and uncovering some subjective perceptions of certain areas.

Semi-structured interviews lie in the middle between structured and unstructured form of inquiry (Dörnyei, 2007). Semi-structured interviews are generally directed towards certain areas, but allow free responses of participants. However, it is widely known that keeping these interviews neutral is somehow questionable (Ferey, 2005), which can be avoided by allowing the respondents to freely express themselves. As for the value and quality of the interviews, Dörnyei (2007) suggests the use of an interview guide (or interview schedule/protocol) as a way to ensure that nothing is left out or forgotten, suggesting alternative wordings of questions in case misunderstood, suggesting other probe questions, and providing some comments to be kept in mind as the interview goes on.

The time frame of the research was directly connected to the time restriction of the PhD course in terms of determining the interview dates, the time space between the interviews and the submissions of reflection reports. The data collection process started at the beginning of the semester, and ended right after the submission of the reflection reports. Then, the data analysis process started to continue until the end of that semester.

At the beginning of the semester, attendees were given guidelines for making a DST, along with some links including samples of previously made digital stories. The participants were asked to find a critical incident or milestone which was one of their worst moments, regarding their teaching. It should have a very significant impact on their teacher cognition and shaping their professional identity. Attendees were asked to identify their story, plan the process, write a script, benefit from peer discussions in this regard, prepare the digital story by considering the audial and visual aspects of it, and finally submit their videos due the specified deadline.

After completing their digital stories, the participants presented their final product giving the chance to their peers to observe and comment on each other's final product. They were asked to give oral feedback on the digital stories in terms of audience orientation, complication of the story and how critical it was to the teacher, evaluation of the story and the level of its clarity, and finally the result of the story and how the crisis was resolved. Afterwards, they are asked to submit a reflection report, where they critically analyze and reflect on their work, and describe their perceptions of the DST implementation in regards with its contribution to their professional development and TPCK.

The researcher interviewed the participants three times throughout the implementation of the digital storytelling as a tool of reflection at pre, while and post phases of digital storytelling task. In the pre-phase, the questions were directed towards the inspection of the participants' beliefs and attitudes as teachers. The second set of interviews was conducted at the while-phase, where participants were mainly asked about the obstacles and difficulties they were facing during the process and what devices or techniques they used to create the stories. The post-phase interviews, on the other hand, included questions about the results of the implementation and teachers' perspectives towards the use of digital storytelling as a tool of reflection. The overall number of interview questions was twenty-five: ten questions for pre-interviews, five questions for while-interviews, and ten questions for post-interviews. The three interviews were held in intervals depending on the participants' progress with the digital story preparation process. Thus, the first set of interviews was made right before the implementation of the process, around the beginning of the semester, while the second set was carried out two weeks after the first interview, during which the participants were still working on their digital stories, and the third set of interviews was conducted right after the submission of their digital stories to the course instructor.

The permission for making the interviews and using the reflection reports, which were presented afterwards by each participant, was obtained from the course instructor before starting the research. The duration of each interview ranged between 10 and 25 minutes. Table 3.2 below includes details about the duration of each interview listed under the participants' names.

Table 3.2: Interviews Duration

Interview Duration	Merve	Ayşe	Darius	Zahid	Noor
Pre–interview	11:59	16:44	13:02	12:36	12:50
While-interview	9:29	10:54	15:14	13:06	11:15
Post-interview	9:41	19:03	12:45	21:31	12:18

Before the interviews, and after obtaining approval from the Ethical Committee of EMU, the participants were given consent letters to ensure the confidentiality of the interviews. Moreover, the participants' consents were obtained before recording and transcribing the interviews. Copies of the interview questions and consent letter form are included in the appendices.

3.4.2 Reflection Report

Reflection reports, on the other hand, are more formal tools of data gathering, depending mainly on a written flow of the ideas. Wells (2011) describes narrative analysis as a study of the narratives as a whole, including the content, context and structures. Furthermore, Barkhuizen (2016) lists some factors that make the use of these narratives very effective as a tool for data collection. The intuitive appeal of narratives, for instance, adds to the value of the tool especially in the social and educational research adopting the qualitative approach. In addition, the space given to participants to express their feelings, views and opinions allows the researcher to have the participants' perception of their behaviors. Based on these benefits of the narrative analysis in unfolding the participants' opinions through narrative and reflection, the reflection report is used as a tool of data collection.

As part of the course requirement, participants were asked to present reflection reports describing their experience and how successful digital storytelling was allowing them to reflect on a critical incident in their own teaching. Additionally, the reflective part of the report was sought to touch upon issues such as the theoretical framework that participants related their critical incident on, the professional aspect of the reflection and the professional growth, if any, that was gained form the experience, and teachers' emotional involvement in the project.

Upon completing the task, the researcher presented a consent letter requesting the permission of the participants for the use of their reflective reflection reports for research purposes. Consequently, the reports were gathered to be analyzed as it is described in the following section.

3.5 Data Analysis Procedures

The analysis of the qualitative data of this research, namely the interview transcripts and the reflection reports, were thematically analyzed through content analysis. According to Krippendorff (2004), content analysis is a technique used in qualitative data analysis to make inferences from text that can be valid to be used and invested in their contexts. It is a set of procedures that aim to collect, analyze and synthesize information in a way that highlights the characteristics of the gathered data.

In the present study, the analysis of interviews as well as reflection reports was carried out using content analysis techniques. The researcher, upon gathering the data, sorted them out in the form of sets. The first set of data (i.e., the audio recording of interviews) were transcribed. During the transcription process certain conventions were considered. For instance, grammatical corrections were made for

better comprehension. Moreover, pauses, laughs and irrelevant sounds were disregarded whenever they did not comply any meaning. Afterwards, the data was thematically analyzed into themes based on the research questions. These themes addressed mainly two major areas: the story itself, and the perceptions of the participants in regards with the DST implementation. In the first area, the analysis focused on the critical incidents that the participants chose for their digital stories, and the rationale behind choosing that specific incident. As for the second area, it was directed towards perceptions of the participants in regards with the DST implementation's role in contributing to their professional development and in improving their TPCK.

The second set of data (i.e., reflection reports) were collected after taking the participants' consent, and these documents were sorted out to be analyzed and then synthesized. These also were thematically analyzed into themes, similar to the ones used with the interview transcripts analysis. Again, the themes used were basically addressing the research questions of the current study, including participants' justification of their story choice, and their perceptions of the DST implementation in improving their professional development and TPCK.

3.5.1 Reliability of the Tools

According to Fraenkel and Wallen (2011), for an instrument to be reliable it has to be consistent in what it measures. This factor has been continually considered in this study through credibility, confirmability and dependability. Credibility is greatly dependent on the richness of the data gathered rather than the size of the sample of participants (Patton, 1990). The current study has considered this element by allowing participants not only to answer interview questions, but also to comment and reflect on the digital stories and the experience itself both orally and in written

forms. The reflection reports provided a thorough version of that reflection and variety of information that can be invested to serve this study's purpose.

As Lincoln and Guba (1985) stated, confirmability in a research can be assured by an 'audit trail' including descriptions about the research elements (data collection, methods, and data categorizations). In this study, the data have been collected, transcribed, transformed, summarized and then combined to reach a reliable version of findings.

The dependability of a research is achieved by examining whether the process of the research and its final product are consistent. To consider this element in the current study, the researcher used the content analysis, which is a common analysis procedure in qualitative studies.

Another tool used to achieve reliability of the study is the inter-coder agreement, where another researcher participated in coding the data provided in the interview. The researcher in this study asked another researcher (an MA student) from the FLE department to transcribe three of the recorded interviews. Afterwards a comparison was made between the two transcription forms, i.e., the one made by the researcher herself, and the one made by the other researcher. As Lombard et al. (2002) stated, the decision that is made by two or more researchers regarding coding while analyzing a content should be unanimous. This will then guarantee a more reliable result. The rate of agreement in the coding procedure of the two researchers was relatively high in this study (more than 90% percent of the themes that were agreed matched).

At the end of the transcription process, the transcribed extracts were sent to the participants, allowing for further checking and auditing from the participants' side if needed. This procedure is usually taken to make sure that no misunderstanding has occurred during the interview or on misinterpretation was made in the transcription process.

Finally, it is worth mentioning that the tools used (i.e., the semi-structured interviews and the reflection reports) did not require right or wrong kind of answers, which perfectly suits the current study's aim and attribute to answer the research question, which mainly explores the participants' attitudes, perceptions and beliefs about their own experience through using digital storytelling for reflection purposes.

3.5.2 Validity

Validity refers to the extent that the tool actually measures what it is supposed to measure (Fraenkel & Wallen, 2011). There are several ways to achieve this element; yet, piloting is the most common procedure to be taken.

The questions of the semi-structured interview used in this research were first checked by an expert researcher. Then, the questions of the interview were shared with a non-participant PhD candidate of the same program, who was not a member of this course and but was engaged in a similar process of creating a digital storytelling as a reflection tool earlier. He was consulted about the validity of interview questions related to pre, while and post interviews. Thus, confirmation was obtained about the clarity of the questions, the sufficiency of information provided and required, and the efficiency of the interview questions in addressing the research questions.

3.6 Summary

This chapter presented the methodology of the study in general. Firstly, the researcher described the context of the study, and the participants were outlined. Then, a presentation of the tools used, interviews and reflection reports was given. Afterwards, data collection instruments were explained. The chapter was finally concluded with the data analysis procedures, supported by the reliability and validity issues.

Chapter 4

RESULTS

The main aim of this chapter is to report the findings of the study, by providing a thorough description of the participants' perceptions. To this aim, the data obtained through semi-structured interviews and reflection reports are analysed case by case, case being each participant, using the themes based on the research questions of the study.

4.1 Analysis Plan and Themes

As stated before, this study aimed to investigate the perceptions of English language teachers, who have experienced digital storytelling as a tool of reflection in their professional development process. To this end, the following research questions were asked:

1) What justification has each participant has as regards their choice of stories?

2) What are the participants' perceptions regarding the DST implementation in terms of its use as a tool for:

    i.   enhancing reflection for professional development purposes

    ii.   improving their technological pedagogical content knowledge (TPCK)

In answering these questions, the overall plan of this study analysis follows the analysis strategy described by Patton (1990). This strategy requires writing each participant's case separately in focus. Each of the participants' case analysis was

planned to attribute to the research questions of the study. As a result, the analysis is categorized under two main themes, namely, the rational of the critical incident choice and the perceptions before- while- after- the DST implementation. The latter theme was also categorized into two sub-themes: the professional development in general and the TPCK in particular. In the first section, participants' responses basically targeted the ways DST contributed to their reflection on their philosophy and experience, their emotional experience, and peer-feedback. The analysis, therefore, highlighted the participants' perceptions regarding these specific areas in professional development, in addition to tackling some of the participants' suggestions for other possible ways to invest DST in future TPD programs.

The second area focused on analysing the participants' perceptions about the TPCK gained through the DST-making experience, and their suggestions for future implementation and better investment of the DST tool to develop teachers' TPCK. A demonstration of the analysis plan is provided in the table 4.1 below.

Table 4.1: Overall Plan of the Analysis

Order	Components
1	Why this story?
2	Perceptions about digital storytelling (DST) as a professional development tool
3	Perceptions about DST as regards TPCK

In the following section, each participant is presented as a case (Case #1, Case #2, etc., with their pseudonyms) and their perceptions about digital storytelling experience are reported in the order indicated above.

4.2 Case #1: Merve

The first case of study is Merve, a 26-year-old participant from Turkey, who had around one year of experience in teaching English at higher education. Although the participant had repeatedly mentioned that it was a short teaching experience, she obviously had some critical incidents to report.

As she clarified in her reflection report, she chose a situation she found herself in during the very beginning of her teaching experience to reflect upon as a critical incident. The incident occurred on her first day as a teacher of English in the department of Psychology in a university in the Turkish Republic of Northern Cyprus (TRNC). Her class consisted of freshmen year students, who were reported to have a good level of English, as she was informed by the administration, and she was expected to teach the students some specialized terminology in the field of Psychology. Although she had done some profound preparation for the class, she still felt some heavy burden on her shoulder as a novice teacher, because she could not receive help from any of the more experienced teachers. Yet, Merve stated that as she had prepared well for her first class, she felt so excited and thrilled to start the class. As part of her early shaped beliefs and principles of teaching, she planned to adopt the use of L2 only in the class as a medium of instruction and to communicate with the students, because their level, as she had been informed, was supposed to be good. As she entered the class, she started by introducing herself in English and asked them to introduce themselves as well. Yet, she did not get any response, and was told by the students that they understood nothing. This was like a shock for her, because while she had prepared her lesson according to intermediate or upper-intermediate level students, they could not understand even the very basic of

communication expressions of greeting and introducing. As a result, she tried to improvise and gave them some simple sentences to introduce themselves. What is more, she had to use L1, i.e., Turkish, while giving instructions.

Related to the DST implementation, Merve indicated in her interviews and reflection report her perceptions, beliefs and attitudes towards several areas which were later categorized under the main themes, as referred to in Table 4.1, and which will be elaborated in detail in the following sections. Despite the fact that some of these perceptions remained fixed and were mostly crystalized after the process, the participant referred to some advantages of the process and how it helped her further improve some areas, or look at them differently. In addition, Merve talked about some difficulties faced as well as the disadvantages and shortcomings of the digital storytelling making process, and thus, she provided some suggestions accordingly. Below is a review of the participant's perceptions in each of the focus aspects of the current research.

4.2.1 Why This Story?

The rationale behind choosing this story, as Merve referred in her reflection paper, is that this situation had a very significant effect on shaping her teacher cognition. As a novice teacher, she came to class holding some beliefs about the best way to teach English to a university-level class. For example, using only L2 in class was the principle that she adopted. However, being confronted with a group of students with very low proficiency level, and the fact that she did not have any contingency plan for a similar situation, had actually affected her emotionally and caused some disturbance to her fixed beliefs. As a result, she had to be more flexible and open about changing her attitude and beliefs. Having been surprised, disturbed and confused in this particular situation, Merve felt that she was obliged to stop and look

back at what went wrong, and in what area she misunderstood the wellbeing of the teaching process. It is this moment of chaos that led her to a better understanding, and crystalized or adjusted her attitudes and beliefs, and it is the reason why she considered this moment to be her critical incident to tell as a story in this DST experience.

4.2.2 Perceptions about DST as a Professional Development Tool

"Teachers, in their very early stages of practice, are sometimes expected to have a "full professional responsibility, unlike many professions", as Merve referred in her reflection report. In her case, this kind of expectation was evident when the administration had given her the responsibility of teaching a class without providing any prior support or pieces of advice. As a result, as a novice teacher she had to develop a survival mentality where she had to make decisions to save the situation, even though these decisions might not be informed ones. Pedagogically speaking, Merve referred to Farrell's (2009) belief that novice teachers develop two different stages in similar situations faced as they start profession. The first one is 'survival and mastery', and the other one involves a dichotomy of either 'resistance to change', or 'staying open to adaptation and change of practice'.

On her very first day of practice, Merve was in the 'survival and mastery' stage, as she mentioned, trying to survive as a teacher. Her focus was mainly on her success as a teacher applying the learned theories into classroom. Then, and as she was faced with reality shock, she was in the second stage of dichotomy: either 'resistance to change', or 'staying open to adaptation and change of practice'. Merve clarified this in her reflection report as follows:

> Considering my own teaching experience, I was the latter one: I was open to adaptation and change of practice. Instead of considering my incident as a barrier, I challenged myself and tried to adapt and change my practice.

This choice of stance is what Merve believed shaped her identity as a teacher, and it was the theoretical base for her later pedagogical and practical choices as a teacher. These projects, she believed, would serve as a powerful tool in the classroom as they motivate students, attract their attentions, help them get over their feeling of anxiety, receive supportive and productive feedback from their peers, and teach them how to perform critical reflection.

In reference to the critical incident she reported in her digital story, Merve explained that in addition to many other factors, this critical incident also shaped her teacher cognition. She pointed out that teachers' perspectives greatly change through critical reflection on such incidents that occur during their actual practice in teaching. These critical incidents create a chance for teachers to look back at their knowledge, thoughts and beliefs that they had during their learning stages and compare them with what actually happens in real classroom situations. However, to have such a reflective perspective teachers need to find ways and tools to help them unveil their already existing beliefs and justify the adjustment they need to make.

Merve stated that the digital storytelling experience helped her to look back at such an incident critically. Before this experience of DST, she had never thought critically about what happened to her, how she felt, and what she would do if she found herself in similar situations in the future. Thus, the DST experience enabled her not only to consider her own beliefs and teaching principles, but also to receive feedback from her peers and colleagues, as they watched her digital story. The positive feedback boosted her sense of confidence and her sense of collegiality, while the negative feedback added to her knowledge and awareness about how to improve her pedagogical practices. This sense of unity and belonging to a certain group is

actually what professional development programs aim to create for teachers, i.e., a 'community of practice'. These communities allow teachers to share their experiences and discuss solutions or alternatives, and as Merve highlighted "People feel that they are not alone, and that there are other people experiencing similar situations out there".

On the other hand, Merve described some complications that she had faced during the digital story making process, which, she believed, could be improved for better results. In her while- and post- interviews, Merve confirmed that:

> The topic itself is limited. When you say something that is a bad teaching experience, it limits you in a way because other than that one experience, I don't have any bad teaching memories.

In other words, she meant that for teachers who do not have a considerably long experience in teaching, the choice of a bad critical incident in teaching can be somehow very narrow. She suggested that a digital story, in order to be better implemented as a tool of reflection, can be invested into a broader topic or at least allow teachers themselves to choose one point in their teaching experience to reflect on.

However, at the very end of the process, Merve seems to have changed her mind, as she stated in her reflection report that:

> The more I thought, the more it made sense to reflect on our 'worst' moments of teaching. That would give us a chance to critically the incident with the help of relevant theories, and then we could have the chance to offer some solutions to our own experiences.

This implies that even though she found the topic somehow limiting at the beginning, in the end it made sense for her that such negative experiences can offer better

understanding and awareness about the complexity and unpredictability of the teaching process.

As for the emotional aspect of the experience, Merve described her feelings in two ways: firstly she talked about her emotions as a teacher facing the critical incident in her classroom, and then she talked about her feelings and emotional state as she was preparing the project. As she described the incident she had been through, Merve detailed how anxious she felt and frustrated with the reality shock she had. She also described how she had to control these emotions and be more open to change, the thing that allowed her to continue the lesson, though in a different way than she planned.

On the other hand, Merve described how her feelings were changing throughout the DST-making process. In her first interview, she demonstrated a very positive and optimistic attitude towards learning a new technique and creating her own digital story. Later, she expressed her confusion when she was first assigned the project and anticipated some difficulties to arise, though she was still generally excited about the new technique. Yet, in the end, as she saw the good result of her work, she was satisfied with the digital story she created, the processes she underwent and the feedback she had received.

4.2.3 Perceptions about DST as Regards TPCK

In terms of the technical aspect of DST, Merve confirmed that the experience developed her technical skills in general. Despite the fact that Merve was supportive for technological integration into education, she did not have any experience about using digital storytelling before. She noted in her reflection report that:

> When I was teaching, I was trying to use digital sources such as video clips, film excerpts, as well as audio materials as much as possible. As a non-native English teacher, I always felt the need to present authentic materials in the classroom, especially in my Prep class.

She also tried to show the students some video-recorded interviews, TED talks, and people's personal stories, as she was interested in the use of these tools in English classrooms.

However, as regards the investment of storytelling as a teaching tool, Merve explained that telling stories in a traditional way could be somehow 'monotonous', which might cause faster loss of interest among the listeners, i.e., the students. The digitalized form of storytelling, therefore, offers a more vivid experience for the audience as it invests not only audio but also visual and alive narration of the story. In addition, Merve highlighted the element of time management that can be considered one of the most distinctive features of the digital stories, as these stories are way more economic in time use and aim to include a condensed version of a story in a very short time.

On the other hand, and like any newly learned technique, the process did not go smoothly without complications. Merve explained how hard it was for her to find a suitable program that she could use to create her digital story. She even had to try several applications, and ask for help from a more knowledgeable friend in order to be able to use one suitable program. She pointed out that if she had had some training or workshop on how to work on such programs, she would have created a better video, and easily overcome some minor problems such as audio / voice synchronizing and sound volume control.

Being able to use DST as a tool despite all of the difficulties, Merve confirms that she would definitely implement it in the future for other professional development purposes as well as in her teaching as a teaching tool to help learners make use of it to improve their language skills. For effective implementation of this tool, she offered some suggestions such as providing some samples of digital stories with some awareness-raising activities, or engaging learners with a project where they create their own digital stories as a team, which would foster cooperation and team skills of the learners.

4.3 Case #2: Ayşe

The second case of study is Ayşe. She is, like Merve, a 26-year-old teacher, who has a Turkish Cypriot background. Ayşe had 3 years of experience in teaching English. Similar to Merve, she considered her teaching experience to be relatively short, as well. The critical she described took place in 2015, when she first started her teaching career in a private language centre that was located in the TRNC. She was assigned a teenage group of students, all of whom came from a Turkish Cypriot cultural background. Depending on the image she had about traditional teachers, Ayşe came to her class holding the belief that teachers should have certain personality features and distinctive characteristics, which enable them to create the needed impression on their students. Ayşe clarified in her reflection report how she had a fixed image of successful teachers: "strict and to maintain the discipline in the classroom.", and that in return, students are expected to be "respectful, punctual, organized and well-prepared." She explained that she had very little experience on what a teacher should and should not do in classroom, and that her knowledge was mainly based on the example provided by the educational environment she was raised in as a student in Turkey. Thus, she treated her teenage students accordingly,

63

not allowing them to laugh, joke and chat in the classroom. She mentioned that despite the fact that they were punctual in submitting their assignments, they showed no interest to participate in the lesson or discuss their mistakes with her. She could feel the negative feelings of the students towards her and her as they remained silent during the class and only talked to her "in bits and pieces by force". She realized then that there was something wrong going on, and decided to observe the more experienced teachers around. Ayşe specifically referred to one of her colleagues, who she found very skilful at dealing with teenagers. It was then Ayşe understood that there are great differences between generations, and that it is important for her to consider her students' needs and interests rather than her fixed expectations from them. Therefore, Ayşe decided to change her approach and strict manner of dealing with students, and she immediately started to feel the change in the students' attitude towards her. Their attention had finally gotten higher and their grades as well. She explained how this change of manner had created a special connection with her students, and that until now they consider her as their "formal friend".

While expressing her perceptions about the digital story making process, Ayşe embedded some positive and other negative attitudes through her interviews and reflection report. She referred to some of the pedagogical, professional and technical advantages of the process. For example, she talked about the way DST helped her look back and reflect on her teaching experience, and how it helped her realize some technical weaknesses she needed to improve. Yet, the experience of DST-making had also some shortcomings that Ayşe highlighted, and like Merve, she also provided some additional suggestions for better implementation of the process in the future. These perceptions, beliefs and attitudes are categorized under the themes as referred

to in Table 4.1 above. Below is a review of the participant's perceptions in each of the focus aspects of the current research.

4.3.1 Why This Story?

Ayşe, in her reflection report, emphasized the importance of the above critical incident, describing it to be "a light bulb moment" for her, as it enlightened her about certain realities in teaching and teacher cognition. This incident caused her a shake of beliefs as she was met with negativity and hatred from students; she describes the incident by saying "The incident I had with my teenage class was a bitter experience but very didactic." For a novice teacher, who came to class holding the belief that and ideal teacher is the one who keeps the class disciplined, this incident has caused her great deal of disappointment as she clarifies "I realized the hateful way they looked at me, which was huge disappointment; to be honest, I was not disappointed in my students, but in myself." This state of disappointment led her to question her standards and what she believed to be the best approach of teaching. To her surprise, the solution was totally something contradicting to her principles; discipline does not actually promote learners outcomes and that students' respect cannot be obtained by force. She explains that:

> Having in the discipline in the classroom does not mean to shout at students and keep them in lines for me anymore. I am well aware of the fact that the silence in the classroom does not really increase the concentration. Sometimes the students need a break during the lesson. In addition to that, knowing your students' interests and bringing them upward in the classroom help the teachers very much because the students feel being valued, so they also value back.

Therefore, this turning point in her teaching career did not only make her question her principles, but also shaped her teacher identity ever after that.

4.3.2 Perceptions about DST as a Professional Development Tool

Theoretically speaking, Ayşe pointed out that her chosen critical incident had a special significance in relation with Lortie's (1975) theory of 'apprenticeship of observation'. Pre-service teachers, as students, subconsciously learn how to teach by observing their teachers and building up their perception of what is good and what is bad in teaching. This actually what happened to her, as she referred saying "I remembered how much I was affected by my own teachers, and the educational system that I was raised in". However, this kind of learning is not based on a solid ground as it is intuitive and imitative rather than explicit and analytical. She further explained in her reflection repoort that:

> The part that students miss was the planning and reasoning since they were looking from the perspective of an audience watching a play, frontstage behaviours, not backstage behaviours.

In other words, students fail to deeply understand the pedagogical aim and logic behind these teaching practices. Ayşe tried to explain the reason why novice teachers would choose to follow their teachers' example. She quoted Buchmann (1987), referring to the term of "ready-made recipes for action" (p. 161), which implies that novice teachers usually prefer to follow tested and familiar practices as they can provide safer results. The apprenticeship of observation, however, is something inevitable, and it is quite dangerous as it might be as Byrne (1993) called it the "snark syndrome (effect)". This term refers to the acceptance of a certain opinion or idea due to its recurrence regardless of the empirical proof. For Ayşe's case, it was until she had to face a painful confrontation with the reality that she could realize the challenges of blindly applying her teachers' principles to her classroom. She made a reference to the challenges caused by the apprenticeship of observation, as described by Conner and Vary (2017). As mentioned above, students only have a partial view

of the classroom actions, which is not adequate to create an assumption of the validity of certain procedures. Another complication is that what is useful for teachers when they were students does not necessarily work with other group of students, because in this case teachers are only considering their own ideas and needs, not their students'. Ayşe explained this issue in her report by saying:

> As part of our teacher education program, it is indicated continuously how important to know our students and their needs. Therefore, the approach we have towards the learners of 21st century requires being different than our own personal experiences. As learners, we may have had an idea about what a good teacher does in the classroom. However, the perspectives of the students now are dissimilar.

Additionally, these teachers might have a quite big gap of knowledge as they lack practicum, resulting from short or sometimes non-existing first-hand experience. Ayşe, in her reflection report, tried to support her opinion regarding apprenticeship of observation by providing many other pieces of evidence form the literature. She aimed to clarify how this modelling could be somehow misleading for novice teacher, thus, teachers need to be made aware of this case and find ways to overcome it. As a result, the opportunity to use the digital storytelling enabled her to share with other teachers, whether for the sake of collegiality or to help other (novice teachers) to be aware of this case and how to avoid it. She pointed out in one of the interviews that:

> It was good to dig in back in the memories and to figure out something, which is, maybe, helpful to other teachers, or especially pre-service teachers, because when we talked in the classroom, they also mentioned that this is something generalizable... So it was useful for me to think about it and remember what I think, so I can, you know, help other people.... So if those videos could help someone like in particular, at least to motivate them, or encourage them, it would be useful.

She also pointed out in her reflection report that the generalizability of her issue, that was confirmed by her peers who watched her digital story, made her feel relieved to know that the negativity she received was not totally as a result to her insufficiency as a teacher.

She further emphasized the importance of having her peers around not only for receiving feedback from them, but also for listening to their stories and learn from their experience. This sharing of DSTs fostered their collegiality and shared feelings and experiences. As a matter of fact, Ayşe highlighted the importance of having colleagues around and receiving support or advice as she was narrating her digital story. She described how, back then, as she was going through her feelings of disappointment in that specific incident, the dilemma she found herself in urged her to seek advice from a more experienced colleague or critical friend. The help and advice she then enlightened her a lot about teaching and directed her to seek better approaches to the problem.

On the other hand, Ayşe tried to depict her emotional involvement in this process from two different angles. The first one involved her feelings and emotions about the incident back then and the way the implementation of the DST made her re-live the experience and the emotions attached to it. Secondly, she described her feelings in regards to the DST implementation process before, while, and after the experience.

In her while-implementation interviews, and while she was writing the script, Ayşe mentioned that she was not sure about choosing the story. Yet, she was considering the fact that the story needs to involve the viewers, i.e., the other participants, as teachers, too. Later in the post-implementation interview, Ayşe described how she

could re-live the incident and the feelings of disappointment she had. She emphasized that she did not feel this way anymore about the situation, because she could actually overcome the problem and realize her mistake. At the same time, she also tried to depict, in her reflection report, her feelings of sensing what was right and what was wrong as a novice teacher. This intuitive vision was only helpful for her to sense that there was something going wrong and she needed to fix it. However, the solutions, she said, that she could find were sometimes instinctive and did not rely on any critical thinking. In her digital story, Ayşe tried to reflect these feelings as the story itself involved students' feelings of discontent and discomfort.

At the same time, Ayşe talked about her feelings towards the DST implementation. In her pre-implementation interviews, she expressed her excitement to start the digital story making process. She felt curious especially to know how this tool was going to help her as a teacher of English language. She explained that storytelling was not something new and that it was something that teachers always use as a form of exercise. So the digitalized form could be even better especially in terms of creativity. However, her feelings seemed to change as she started making her digital video. She seemed to be lost in the process. She mentioned several aspects of the DST-making that caused her confusion, including script writing, story choice, technical issues and narration problems. She also explained in her reflection report that she had never looked at her teaching reflectively or relate it to the literature, which might be the reason she was puzzled in choosing the incident. In the later stage, Ayşe was finally satisfied with the final product and the experience itself. She pointed out in her post-interview that:

> I'm happy that it made me think, and I look through like my memories and everything, things happened in the classroom before, and did they affect me

in a very critical way, because I suppose to write about it. So this was good so I believe that it was useful.

Ayşe continued explaining how supportive and helpful for her the feedback of her PhD peers was. She clarified that she was able to reflect on her story depending on multiple perspectives, and she could hear about their stories and relate to them. Even if she did not face similar situations, she could put herself in their situation and ask herself what she would do, feel or think about if she were in their place. She concluded in her reflection report by saying that this project even convinced her about "the importance to build up a bridge between novice and experienced teachers".

Nevertheless, Ayşe mentioned that the experience of DST-making had actually made her look back and reflect on her experience. Yet, it did not basically help her find the answer of the question, because she was reflecting on an experience that she had to overcome a long time before. She confirmed that the DST experience helped her theoretically, in thinking about situations, reflecting on her teaching and crystalizing her beliefs but it did not support her practically, i.e., she did not learn any pedagogical strategy or find an answer to a question. She also pointed out that practice should come first and then theory comes after. Yet, in her case of DST, the experience itself was reflecting on something that had already existed, but it did not contribute in creating new attitudes or shaping new principles of teaching.

Therefore, Ayşe suggested that pre-service teachers should learn how to reflect on their own teaching before they start their teaching career. She further suggested that DST should be used as a tool to help pre-service teachers learn to critically reflect

and find solutions. She also suggested that the topic to be given to the participants, whether pre-service teachers or classroom students, should be broader, because she believed that not all students can produce something valuable when limited to a specific topic. She said she believed it would be a good idea to involve the students beforehand and get some feedback from them about topics of interests or areas that they would like to reflect on.

All in all, Ayşe's perceptions towards using DST as a professional development tool were generally positive. She confirmed the benefits she gained from the experience of creating her own digital story by stating that it actually boosted her professional growth, and gave her the chance to gain insights in self-reflection, critical thinking, learning more about the apprenticeship of observation, peer-collaboration and learning from a more experienced colleague.

4.3.3 Perceptions about DST as Regards TPCK

Regarding the technical aspect, Ayşe demonstrated her support for the use of technology in education in general. She pointed out that since her MA degree was in Information and Communication Technologies in Education (ICTE), she found the idea of technology integration appealing for her, and would always like to know more or learn new techniques that she can invest in classrooms. However, that during her study years, either in schools or later in higher education, she did not use technological devices in classroom due to lack of equipment or support from teachers themselves. Despite this, she kept on trying to find ways to invest technology in her classroom, and she mentioned that she used YouTube to present listening activities. She clarified how it was important to bring authentic materials for students to model, learn from and improve their communicative skills.

Moreover, Ayşe mentioned that she sought improvement in terms of technology integration into education during her professional development involvement. She referred to some workshops that she attended, which focused on the use of apps and websites to be used in classrooms, such as Socrative and Edmodo. Unfortunately, she did not have a good chance to apply them in her classrooms due to shortage in the facilities in the educational institutions she worked for.

On the other hand, Ayşe explained that integrating technology into education only for the sake of using it was not enough. It is not a simple procedure to follow, and there needs to be some pedagogical aim behind. Therefore, teachers need to invest it properly, making sure that students are not using it to waste time, have fun, or just to satisfy their curiosity about a new device. She even had to explain to her students several times what the aim behind each of the technology-aided exercises was, as they underestimated the benefits they gained from these activities. Teachers need to make their students aware of the importance of any new device or technique. By claiming so, Ayşe meant school students, pre-service teachers and in-service teachers. As a matter of fact, she tried earlier to conduct a research on how is technology used by in-service teachers. However, the problem faced was that teachers in service did not use technology at all in classroom, and some of them did not really know what some technological devices meant. She clarified the benefits of using technology as a teacher in the pre-interview by stating:

> So that's why I believe like, since I'm interested in technology and the usage of it in the classroom, I believe it's going to help me a lot, at least to widen my perspective… you know, it may also just like, bring other ideas. I mean, we never know after this storytelling come another technique or another tool, you know.

As for the specific experience of implementing DST, Ayşe mentioned that she used Movie Maker for creating her digital story. She decided to use this program because she had a prior experience using it, and she would not use another program for a new project, for safer results. Still, Ayşe said that she sought informal help using different websites, asking for the opinion of her colleagues, and learning from their experience using similar or different programs as well. She also pointed out that she received help from her course instructor, who provided guidelines, samples of previously made digital stories, and her feedback throughout the project.

The experience, Ayşe explained had enlightened her about certain weaknesses she had, and areas that she would love to improve in the future, such as narrating stories, and some other technical skills. She also felt quite satisfied with the skills she learnt out of this DST experience; she became capable of using the program more comfortably in her career, and this would make her confident to even use DST in her classroom as a tool for learning and teaching.

Despite the fact that Ayşe was familiar with the program she used, she faced some difficulties while making her own video. She mentioned that finding suitable photos for the story was challenging. She preferred to use her personal photos to create a very effective digital story; yet, she did not have any real photos of her at that time. As a result, she decided to use some of the photos available online, and this process was difficult as well, because of the copyright issue. Another obstacle she faced was regarding the volume control when her voice was synchronized with the music she included. She mentioned that she went through some trouble to solve this problem, which might be even considered a minor technical problem; yet, it was time consuming. Finally, Ayşe elaborated on the problem of narration, and how her voice

and narrating was not good enough for the DST. She attributed this problem to her lack of experience in narrating, and the fact that she was used to face-to-face communication, rather than talking to a machine.

At the very end of the DST-making process, Ayşe provided some suggestions for the future implementations of the tool. She said that since this experience requires creativity, it is better to allow the participants more freedom in choosing the topic and deciding what to share. In addition, she suggested that a training course would be advisable, as it would help the participants to overcome some of the minor technical problems, and hence, save their time and effort. She also supported the use of DST as a tool in English language classrooms because it provides authentic materials and can improve learners' narrating skills, language skills as well as reflective and critical thinking skills. As for teacher education and teachers' professional development, Ayşe suggested in her reflection report that:

> Digital storytelling projects of some experienced teachers can be shown to pre-service teachers to analyse the incidents and at least have some understanding of some possible solutions to the problems happening in the real classroom. The lack of practicum as teachers in the classroom is the reality of teacher education programs. Nevertheless, the awareness of pre-service teachers might be enhanced to some extent with the real stories rather than only theories in the books.

She, therefore, found DST as having some implications for teacher education in general and ELT education in particular.

4.4 Case #3: Darius

The third case, Darius, demonstrated an interesting shift in perceptions regarding the DST implementation, and in the type of critical incident chosen as a subject of his digital story. Darius is a 27-year-old teacher from Iran, who had around 9 years of experience in teaching English. Darius noted that he had been through several pivotal

incidents that shaped his teaching identity, but he chose to report the one that had affected him the most during his early stage of service.

Darius first clarified that he started teaching at a very early age, 18 years old. Despite the fact that he had not even finished his higher education by then, he had joined several teaching training courses workshops, such as TCT and other local programs based on CELTA and DELTA that qualified him to be a teacher of English in some of the prestigious private institutes in Iran. Therefore, he had a good level of English, a minor qualification certificate, and very little experience in teaching. He explained in his reflection report this point by saying:

> I was not very confident like many other novice teachers but at least I was sure that I was one of the best with regards to my knowledge of language... On one hand, I had a good command of English, but on the other hand, I was not the best when it came to social interactions.

Darius described the early period of his career as one of the most critical and emotional situations he had been through. The incident happened when he was about to start his first lesson in one of the English courses in a language institute in Tahran, where students were mostly university-level or graduates. Darius back then was around 18 years old, and it was his first year of experience, lacking some pedagogical knowledge, as he stated. As he entered the class and greeted the students, he noticed some reactions displaying discomfort among some of the students. Then, the students decided to leave the class as a form of protest on a certain situation that he could not comprehend. This was like a shock of Darius, leaving him confused and frustrated for not knowing what he did wrong, or whether there was something else bothering the group of students. However, the institution management tried to convince the students, and Darius himself as well, to go back to

the class and continue till the end of the session. As a result, Darius decided to break the ice by bringing humour into class and encouraging students to open up to him and explain what bothered them. To his surprise, one of the students stated that his issue was mainly because he expected a female teacher rather than a male one, as the norms were in Iran. Instead of taking the issue personally, Darius tried to add some fun element to the expectation and said "there is not much I can do about that but I offered to dress sexier next time". The next day, Darius was informed by the institute administration that they would like him to continue the course with that specific class.

Thankfully, he said the course went well and this class seemed to be one of his favourite classes. Darius explained that it was actually humour and honesty that allowed him to approach the group of students, and talk to them as a friend rather than a teacher.

Through a reflection report, and there interviews, Darius tried to manifest how the experience of DST-making went and what difficulties he went through. He also demonstrated his perceptions very clearly about the experience of DST itself, his critical incident, and the attempt to combine them in one product.

However, unlike Merve and Ayşe, Darius had generally a very negative experience and attitude towards the DST implementation project. He anticipated certain difficulties at the beginning of the process and expressed that it would be a lot of work. Going through the DST-making experience actually confirmed his expectations and highlighted other shortcomings of the process. Though he tried to point out some minor benefits gained from the process, his general attitude was still

very negative. As a result, Darius presented in his reflection report some suggestions for future DST-making process, and some other alternatives for reflection on teachers' experience that would be more effective and less demanding. His argument, criticism and description are again based on the themes provided in Table 4.1.

4.4.1 Why This Story?

Darius pointed out that this experience was one of the most difficult; yet, very enlightening for him. He also stated that he actually wanted to use this specific incident as a material for his digital story because it shaped his teaching philosophy, it was a unique situation, and it was interesting to report. Darius explained that since the aim of digital storytelling in this experience is to provide a ground for teachers to relate to, sympathize, and learn form, this story can fulfil all the needed aims of reporting on a teacher's critical incident.

Darius elaborated in his reflection report that back when he was a novice teacher and at a very young age and very limited experience, he could not think of a similar situation to happen:

> I really did not learn much about teaching in the school in that year and all of my knowledge came from my own experience in language classrooms and an intensive teacher training course that I had passed.

Thus, he had no idea how to behave or what action to take if he found himself in a very critical case. Similar incidents are not usually mentioned in the teacher training courses, nor can be found in books. So, for novice teachers, whose confidence in classroom practices is not strong enough, a critical incidence of such would be responsible for shaking them up. Teachers at that point start questioning their teaching standards and principles. They start to doubt every aspect related to the situation, starting from their personality, moving to their teaching practices, and

ending with the environment surrounding or the people involved. Darius described how stressed and confused this incident made him feel, and that it left him in shock for a while, before he decided to take action and deal with the issue openly with the group of students. Darius also explained in the reflection report that he was very satisfied with the decision he made and reduced the level of stress by humour and honesty, and that he would actually behave similarly in case he was faced with a similar issue again, though he would have some things done differently as he knows now how to grasp situations faster as an experienced teacher:

> Frankly, if a similar situation would rise again, I believe I would handle it in a similar fashion. Perhaps with less stress but more or less in a similar way. If I wanted to do something differently perhaps I would stop them sooner and would try to talk to them before the administration was involved. I do not like forcing the students through the administration. I would have liked it more if I was the one who returned them to the class. Another thing that I would do is that I would have asked them more questions to find a more accurate reason behind their request. That being said, once in class, I would still do something similar. I would do my best to make the mood better and then talk as straight as possible to fix the issue.

Darius elaborated on the lessons he believed that this incident helped him in. For instance, he mentioned that he needed to be true to what he was. In other words, at the beginning he was trying to be very "teachery", but later he realized that he was not representing his real self. It was until he started to act naturally, fun yet strict teacher that he actually was able to prove himself, and reach the success he aspired for in his classroom. Another lesson Darius referred to was that he should not consider himself as a superior just because he is a teacher. Respect cannot be gained through authority but rather by giving respect to students with all their diversity. A third lesson taught him that he needed to be open and honest with his students, and encouraged the students to do the same. Additionally, he learned that he needed to handle criticism without taking it personally or having negative feelings about it.

Finally, he emphasized the importance of laughter in reducing stress in classroom, and breaking the ice among classmates and between the teacher and the group of students.

In light of all the previous contributions of this specific incident on shaping Darius's personality and teaching as well, he decided to create a digital storytelling highlighting the feelings he went through, the thoughts, and the lessons he learned from.

4.4.2 Perceptions about DST as a Professional Development Tool

Gender preferences in the teaching profession is not a newly emerged issue. Darius, in his reflection report, made reference to several studies supporting the fact that students in different communities have certain gender preferences to be taught by. Some of these studies include Varughese (2017) and Taqi et al. (2015), which provided some evidence that the majority of learners prefer male language teachers. On the other hand, Darius confirmed that despite the evidence provided, this is not always the case in different cultures. He supported his claim by the study of Duffy, Warren, and Walsh (2001), which reported findings of higher interaction between female teachers and male students, and the study of Dee (2005) that showed a significance in cooperation when teachers are of the opposite sex than that of students. Darius related to the later studies in his classroom incident. It was apparent that the objection came from a male student who was expecting a female teacher for the language course as he probably had a better interaction with female teachers in other classrooms. Darius explained that the request first came from this very specific student, who was then supported by his other male and female classmates as they were his friends.

On the other hand, Darius tried to reflect on another aspect of his teacher belief and cognition. He repeatedly emphasized the fact that teachers need to make the students feel comfortable and give them priority in classroom, and that teachers should not feel superior to students just because they are the masters of the class. He pointed out so in his first interview as part of his teaching philosophy and beliefs:

> The most important people in the educational process are going to be students, so personally, I really do believe that what the students want is what going to run the class actually. It's their needs, like not what we want as teachers to teach them! What they want to learn from us that they think might contribute to them and help them to improve. I really try to be, like, context-relevant and I try to be like friendly with the students. I don't believe in the teacher as the master of the class and I really try to implement it in my class as the best of my duty.

In other words, Darius did not believe that teachers need to claim that they know everything beforehand, nor they are expected to be right at all times. Teachers need to feel humble and make students feel free to ask, criticize or request any changes or explanations during their educational experience. This, he explained, is not an easy task to fulfil in the context of Iran, where the dominant belief is that teachers are like Gods, who should not be opposed or argued regarding their teaching.

Darius pointed out that he had to learn this mainly through his experience in classroom interaction, and through different incidents he had been faced with, one of which was the critical incident he chose as a material for his digital story to reflect on. He also had some other sources during his professional development process, which helped him shape his teaching identity, including teacher training courses and exams, such as Technical Teacher's Certificate (TCC) and Teaching Knowledge Test (TKT). In addition, he attended several mandatory workshops and seminars but he found them a little helpful. He mainly benefited from his personal article-reading and

attending conferences, as he was selective of the areas he needed rather than attending random mandatory educational courses that provided teaching standards. He explained that by improving his professional and pedagogical knowledge he was self-motivated to develop the areas and learn about principles he would actually benefit from. He also mentioned that he was able to improve his reflection skills and peer-observation and collaboration when he worked as a teacher assistant during his BA and MA studies. He even joined teachers' community or association where they could meet, share and discuss their teaching principles. This foreign language community contributed to improve his background knowledge and work on projects similar to DST implementation, which made the DST-making experience quite familiar. However, Darius believed that such projects were meaningful back then, but he felt sceptic about the implementation in a PhD context as part of the course requirement as he claims: "But in the context of here, like I still haven't, at least personally, gotten the point of it." Despite the fact that he actually had to relive the experience and remember some of the issues he had gone through as he wrote the script for the DST, Darius emphasized that it was quite demanding to create the digital story for the sake of reflection only. He explained that some of the other participants were actually struggling to make the very basic of the video, while they could make something more effective with less effort, such as PowerPoint slides.

Darius mentioned that there had been some moments where his peers would benefit from each other's comments and reflection. For instance, he received some positive feedback on his digital story which boosted his confidence. He also pointed out a very positive comment when he said in his report:

> When one of my classmates said that they could visualize me as a human in the story. It meant a lot to me because that was what I was looking for when I was doing the project.

In addition, he could also benefit from the criticism he received to notice some areas to be improved in his future use of digital story. Still, he found that these comments were very weak in terms of providing rich information on the digital story and the incident itself, as he claimed in the reflection report:

> I wished that they had told me what they would do in that situation. I would have liked to know what they thought of my strategy or how they would deal with a situation like that. I think I could have learned so much from that. I appreciate the feedback on the technical aspects but I really would have loved if I would receive some feedback with regards to the content of the story. I have so many questions now that I perhaps should have asked then myself. How did they find the story? Did it shock them? Could they relate to it? Did they like my solution? What did they take away from that story? What would they do in that situation? Would they change even my transcript perhaps? These are questions that I wish I knew the answers to.

Darius also shed the light on the emotional side of the whole DST experience and the way it made him go through the same feelings when he first encountered the situation. He first explained how the chosen critical incident was a "near and dear" to his heart. The emotional experience he went through back then shocked him as a teacher; it put him in a situation of stress and anxiety, and made him experience some doubts and deeply think of what is effective in the classroom and what is not. Moreover, what came out of this experience taught him a great deal of lessons, shaped his teaching, and fostered his confidence in some of his beliefs, especially regarding the use of humour in classroom. He further explained in the his report how the incident made him crystalize his belief of providing a comfortable atmosphere for sharing ideas and criticism, and that this belief is not only based on classroom practices, but also with his peers and colleagues:

> This view has resulted in people who even do not know me to open up to me which I find interesting. I have heard this so many times that 'I do not know you very well but I feel like I can trust you and be honest with you'. I am actually proud of this. I see this even with my new classmates in the program. They may not necessarily love me, or even like me, but I feel that they feel they can share their views with me. I really appreciate that and I

think this is one of the best things that I have learnt which has helped my personal and professional development.

Thus, the use of digital storytelling allowed for such feelings to be relived and reinforced.

On the other hand, Darius talked openly about his feelings towards the DST implementation. He mentioned that he went through some feelings of anger as he was assigned the DST-making project and could not understand the ultimate aim of it. He noted in the reflection report that by saying:

> I tried my best to enjoy the project and I made it as enjoyable as possible but I could not relate to it. I believed that I could tell my story more effectively in a 10-minute presentation rather than working tens of hours creating a five-minute video.

Although, he did not like the project, he felt that since he would have to go through the new experience, he would do it the best he could: "That I hate the project, from bottom of my heart, but when I do something, I do it to the best of my ability." Thus, instead of creating an emotional video, Darius decided to bring the spirit of his story by investing the element of comedy in the digital story he created. He repeatedly emphasized that he wanted to avoid the repetition that he noticed whether in the sample of digital stories provided or in the videos presented by his peers. He did not want anyone to go through the feeling of boredom as they watched his digital story, and to actually live the experience and get the message he intended it for. Therefore, bringing the element of laughter was somehow an important theme in his story.

Nevertheless, his feelings of disappointment with the DST implementation kept coming to the surface until the end of the project, and he tried to state his negative

83

perceptions very clearly in the interviews and the reflection report. He mentioned that he did not actually realize any professional development effects, and did not add much to his existing knowledge. Moreover, he believed that the DST did not even serve the basic aim of reflection as the focus was more on making a video and overcoming technical obstacles.

Taking all the above into consideration, it can be said that Darius basically had negative perceptions about the experience of DST-making. He tried to do justice to the experience and noted down some significant benefits gained throughout the process: "I also enjoyed going through the story again. I think I did not notice the importance of some of the conclusions until I revisited the story in details for this project". He also tried to provide some suggestions for future implementation of the DST by advising to assign this task as a group work project, where each member can take the responsibility of one aspect of the whole process.

4.4.3 Perceptions about DST as Regards TPCK

Darius frequently mentioned that he was supportive for the use of technology in education in general, and that if he was given the choice, he would like to invest new technologies into classroom. He gave some examples of his experience in using technological devices during his education and inside the classroom, and clarified that despite the general trend of resistance to new interventions to classroom, he would not have such rejection or resistance. Instead, he would try to find ways to benefit from any new addition as he pointed out in his pre-interview:

> As a teacher, I always insist on my students to use it to the benefit of the class. I even had a published a paper with regards to, like, using mobile phones instead of dictionaries in the classroom.

He also referred to his experience using smartboards in his teaching experience and he found such a tool very helpful for many purposes and for promoting interaction in classrooms.

Darius expressed the shortage that the higher education encounters in regards to investing technology to the pre-service and in-service training programs. He believed that universities in the context where he received his education did not actually use enough technology in teacher education. He attributed such a lack of update due to the fact that teachers in some cultures have the mentality that what is old is always better, and that some are still following the previous methods and rules of teaching, by considering such preserving of heritage as an achievement.

As for the use of digital storytelling, Darius confirmed that he had never used it before, but he had used different database for telling stories. He gave an example of social media, such as Instagram, where people continuously tell their stories in a digitalized form. Thus, even though he did not use the DST, he believed that such a tool is quite a familiar one for him, and he would like to learn new techniques.

During his DST implementation process, Darius mentioned in the interviews that he had a quick look at the samples that was given to him as an example to learn from and follow, but he did not entirely like the materials given. He had a different image about the DST especially when used for reflection purposes. Therefore, he read the guidelines but did not entirely stick to them. For instance, he preferred not to use the background music in his digital story because it sounded irrelevant and that it would take away from the story in a negative way. In addition, he chose a different program from that used by the rest of the participants. He explained that since his story was

somehow humorous, he preferred to use a program that can add a cartoonish element, so he used Moviely.

Darius, like all the other participants, talked about some of the difficulties he went through while creating his digital story. He confirmed that the tool itself is not entirely a new concept, but still, he was using a new program and he needed time to learn and get used to the program. He also noted that he hosted a three-hour program before, but creating a very condensed video and turning what would be seven or eight pages into five-minutes segment was not an easy task, though it is a good idea to have limits because it would focus on a very specific area and avoid unnecessary elaboration.

Because the technical aspect was quite problematic for most other participants, Darius explained that to fulfil the purpose of telling a story and reflecting on it would have been more effective if it were done face-to-face. Most of his peers' digital stories ended up to be something similar to PowerPoint slides presented with music. Their lack of technical skills and the time frame they had was very challenging. He also mentioned some other technical problems that he faced himself, as well. For instance, he had to re-do some parts of the video or re-record an audio several times before he reached his intended design. In addition, he referred to the difficulties faced in certain features of the video to be applied as he needed access to premium products. Thus, he also suggested, as Merve and Ayşe earlier, that a short training workshop should proceed the implementation. He added that although he used a new program, he did not actually learn anything new because it was very similar to other programs he used before. Thus, the DST experience did not add anything to his existing technical knowledge. Darius also stated in his reflection report that such an

experience was not one that he would adopt in the future, not for his reflection nor in the classroom with students:

> That being said, I do not think I will use digital storytelling in my classes or perhaps personally again. At least not in the current format. I feel that I spent so much time and achieved so little in the end. I could have perhaps told the same story with a PowerPoint presentation and spend one tenth of the time that I spent on this project, perhaps even less.

He explained how he was demotivated to go with the program as he anticipated the difficulties arisen and foresaw the weaknesses of the DST tool for reflection purposes. He finally concluded that such a technique would be probably useful in a time where technological facilities are more developed or accessible, which would diminish some of the hurdles faced during the current DST implementation.

4.5 Case #4: Zahid

Zahid is a 54-year-old candidate, who had over 17 years of experience in teaching English. Zahid is from Pakistan and he taught English in both Pakistan and Saudi Arabia. The participant had been engaged in formal professional development as he obtained several diplomas, an MA in ELT, an M.Ed in Teacher Training, and currently he was in the PhD program. He also mentioned that he completed a 4-week CELTA course and one module of DELTA. Despite his long experience, Zahid stated that the critical incident he chose happened during his very early years of his career as a teacher. He justified such a choice by saying: "The reason could be that we face more awkward situations when we are novice, ambitious and theoretical."

Zahid talked about his very first day in teaching after his graduation from the BA program from the English language department. He explained how he was new to the experience when he joined a local private school. He was assigned a group of young adult students. As he started his lesson, Zahid noticed that students stared back at

him blankly. They were not interacting with him or showing any interest during the session. He knew immediately that they did not actually like his approach or some aspects of his teaching. Afterwards, he was called to the administration office, and was informed that the students complained about his weak pronunciation of English words and that he needed to improve this area specifically. To his surprise, he was dismissed from the job on his first day and in the presence of many other teachers. At that time, Zahid was shocked, devastated and felt dejected. However, his personality traits and his beliefs helped him through and as he said, "did not allow me to remain in this phase for a long span of time." He immediately started analysing what happened to him, trying to spot the loophole that got him into this difficult situation. He stated in his reflection report that later her realized that:

> My weakness was because of my circumstances that fate put me in. I did not have a chance to study in college or university as a regular student where I could have learnt from experienced teachers and my peers. This learning experience could have polished my pronunciation and other personality traits.

As a result, he immediately decided to improve his academic and language teaching skills, and obtained a diploma degree in ELT. During this program, Zahid tried to focus on phonology and phonetics. He intensively read and revised several dictionaries, where he could check and correct the words' pronunciation. Afterwards, Zahid decided to complete his MA degree in ELT, and also applied for a job at the same university. He was finally accepted as a teacher of English, and Zahid felt that his efforts during those three years to improve himself academically and pedagogically were finally fructified.

Zahid expressed a very positive attitude about the DST implementation experience from very early stages of the process. Through the interviews and the reflection

report, he explained how he initially supported technology integration during his teaching experience. However, and unlike most of the participants in this study, Zahid went through some major difficulties dealing with the new technological device. He had to create and edit his digital story several times before he produced his final result.

Additionally, Zahid tried to constantly find implications of the experience into his teaching practices and was mainly concerned with the use of DST later in his classroom. He repeatedly mentioned some suggestions for the ways to invest the DST tool in his lessons and to help learners develop different areas of English language. With the guidance of the instructor and in response to the interview questions, Zahid demonstrated his perceptions towards the DST implementation in contributing to his professional development. He specifically elaborated on the three major areas, namely reflection, peer-feedback, and emotional experience of the incident and the DST-making experience. He also referred to his TPCK, and the way it was improved through the DST implementation experience.

His perception included the positive aspects of the DST implementation, the difficulties faced, and some further suggestions for the digital storytelling implementation and investment in different situations. Below, an overview of Zahid's perceptions are thoroughly presented.

4.5.1 Why This Story?

As noted earlier, Zahid clarified that he decided upon a critical incident that happened to him when he was a novice teacher, because it is the period where teachers find themselves confronted with reality that is sometimes far from the theoretical education they have during their study. He also highlighted that due to his

long experience, there were quite a big amount of memories and critical incidents that he would talk about. However, he preferred to choose one that deeply affected him and shaped his personality as a teacher as he mentioned in his while-interview:

> First I thought about what is the event in my life that is more important, because there are many events in my life. You know my life is too much and I have a lot of events. But what is most important, which relates to it, and then what I can remember, because you can't remember all the things.

This incident, Zahid pointed out, taught him about priorities in his choices, and that for him to achieve what he aspired to he needed to find the best way to do it. It also made him realize that he needed to look at his potentials realistically rather than emotionally. Thus, he accepted this incident as part of his life journey rather than just a hurdle that would demotivate him.

On the other hand, Zahid pointed out in his reflection report that though it was a very personal experience, he chose such incident because it would be easy for listeners or viewers of the digital story to relate to it:

> Many listeners and viewers can identify themselves with it and feel encouraged to take bold steps and choose long but reliable and fertile path that would produce lush green meadows after some consistent and concerted efforts.

He clarified that there are many unpleasant incidents that teachers might encounter during their teaching career. They need to milk out the lesson from every situation. For him, this incident was one of his most difficult and critical situations; yet, he could learn from it the most.

4.5.2 Perceptions about DST as a Professional Development Tool

In his first interview, Zahid talked about his teaching philosophy in general and some of the fixed principles he had about teaching. He initially highlighted the gap that

occurred between what he had been traditionally taught about the classroom, and what he later learned and discovered about the best approaches to be used in the classroom. He explained how traditional education always depicted teachers to be the most important member in the classroom. Later, as he pursued his professional development and completed his MA degree, he found out that students were actually the centre of the educational process. It is the learners' outcomes that should be sought, and hence, classes should be designed to be student-centred, as he explained in his pre-interview:

> Students are the central point. So the classes should be student-centered. So now my philosophy is that we are in the class not for ourselves, we are in the class for our students and we should teach in such way that they should get something and they should achieve their target.

On completing his digital story, Zahid expressed his positive attitude towards the use of DST, especially as it was totally dependent on participant's effort. He elaborated that the role of the instructor in this whole experience was to guide the participants through the process by providing some guidelines and additional links to check previously made samples of DST. He prized the tool of DST for contributing to his pedagogical knowledge and supporting his pedagogical principles at the same time.

Later in his report, Zahid confirmed that the DST implementation was rather a rich practical experience than it was theoretical. In other words, most of his theories and beliefs were quite fixed by then as an experienced teacher, but some of these beliefs were crystalized by involving in the experience of DST-making. He referred mainly to the contribution this tool made to reflect on the critical incident, receive peer-feedback and boost their collaboration, and in exploring the emotional experience of teaching.

As a reflection tool, Zahid emphasized the great effect the DST tool had in allowing the user to look at his/her experience from a different angle. It made him look back into his memories and find the one critical incident that affected him the most as a teacher. He confirmed that in his reflection report by saying:

> Yes, reflection on this incident contributed to my professional understanding. This incident and its aftermath taught me many lessons and one of them was that tribulations do not come to break us rather they occur to make us.

It is worth mentioning that Zahid believed in reflection in general. Teachers need to reflect on whatever they do in order to be able to rectify themselves, and DST could be one of the tools that facilitate that reflection. Furthermore, his digital story allowed him to pass on one of his most valuable lessons learned to other teachers, i.e., his peers. This lesson was that to solve a problem, teachers need to admit their weakness first. The second part of solving the problem is taking practical action towards overcoming difficulties or developing any weaknesses.

Reaching out to other teachers and sharing a personal story with peers is another point of strength that Zahid elaborated on. Earlier in his pre-implementation interview, Zahid pointed out that whenever a teacher is in a problem, he/she will try to seek help from more experienced professionals. Therefore, he believed in the need of collegiality as an essential part of the profession. Thus, creating a video of one's own problem and sharing it with a community of practice would facilitate communication among teachers, and allow for discussions and advice-sharing. He provided some examples on the way he benefitted from his peers' comments on his digital story, and was able to improve his final product. He explained so in the reflection report by saying:

> All the weaknesses were noted by my peers and they suggested some other programs which were free and user-friendly. They also noticed that my sound was not giving a natural flow and storytelling style.

As for the problem of narration, Zahid like many other participants, considered this issue one of the skills that needed to be improved. Normally teachers share other's stories, but narrating a story of their own was quite new for them. As a result, they sought advice from each other, and one of Zahid's peers advised him to try narrating his story to friends while recording, rather than to a microphone. He said that this was a very useful advice and it actually helped him to improve his narrative. Another valuable piece of advice Zahid received was in regard to his story construction. He was informed that the story seemed to give little details about his students during the incident, and it was revolving more around him as a person. This was also an eye-opening comment that made him appreciate the feedback of his peers. Zahid was very thankful for the collaboration throughout the DST implementation process that occurred among the teachers as peers, and that he appreciated the advice he received.

Zahid, then, elaborately explained the emotional aspect of the DST implementation. He first referred to his emotional experience during the incident he went through as a novice teacher describing it as very difficult and shocking. These feelings were somehow depicted through the digital story he created, as he wanted to engage other teachers in the experience. However, these feelings were briefly described during the interviews and in the reflection report. On the other side, Zahid described his emotional experience during the DST-making experience. He explained that he went through three phases: the first one when he felt indifferent to the experience and he underestimated the amount of work needed for the digital story making, then he went through feelings of frustration as he started creating the video, and finally he felt

quite satisfied and happy with the end product after completing the DST-making process, as he referred in his report:

> Emotionally I was indifferent before starting the project, a bit frustrated during the process and on cloud nine after completion. Overall, I am very happy to learn something new.

He explained that despite the fact that it was a very tiring task to fulfil, creating a digital story made him feel very good at the end, and gave him the sense of achievement. He elaborated that there were times where he felt demotivated as his video was not meeting his expectations. He said that though it was "disheartening", on intervals, he had moments where he remembered one of his teacher's words: "If you get confused, congratulations. You are learning something new." He explained in the reflection report, that the boost of his will was attributed to two reasons:

> During completion of this project I lived between hope and despair but surprisingly two opposite phenomena nudged me to action. The main stimulant for me was that I was learning something new by meeting the requirement of a course at the highest academic level. Despair was a challenge and hope was a motivation for me to carry on journey on this henceforth unfamiliar professional path."

These two main drives helped him to achieve the intended goal, and though he mentioned later that it could be improved, Zahid was very satisfied and happy with the experience. He concluded that the DST implementation had multiple impacts on him. He clarified that the experience, though it was relatively a short one, helped him grow professionally by believing that that no matter how experienced you are, there is always something new to learn. It helped him develop pedagogically by learning that he needs to trust his students with more sophisticated tasks. Additionally, he said he felt now that he had learned a new teaching technique to be invested in the class, i.e., the tool of DST or as he described it: "to create a congenial learning context that

can be used in a range of educational settings." The implementation had also added to his technical knowledge by learning how to create his personalized digital story and dealing with movie-making applications. He referred in his report to other benefits gained by saying:

> As a teacher and as a student I was encouraged to think thoroughly about the meaning of the story, personalize my experience and reflect before and during the process of developing and communicating my story. During peer observation I learned about people, places, events and problems that characterized their individual life experiences.

Like all the other participants, Zahid made some suggestions for further use of the DST as a tool for different educational purposes. He emphasized the importance of including DST-making in every teacher training course, as it would help them realize their actual teaching philosophy, and engage them in self and peer-reflection. The tool would also equip pre-service teachers with the needed technological skills before involving them in the actual teaching. He also suggested using digital stories in conferences, where teachers can present their experiences and create an interactive atmosphere by allowing discussions and questions.

On the other hand, Zahid greatly believed in the great effect of using digital storytelling in classroom as an educational tool. He noted that he would use it for students "presenting themselves pictorially accompanied by their own voice". This would help learners not only to practice language skills of listening and speaking, but also would improve their analytical skills and narrative abilities. Since making classrooms interesting and involving for students is sometimes one of the biggest challenges teachers face, the investment of a new tool such as DST will grab learners' attention and make the classroom centered towards learners and their personal experience and development.

However, Zahid strongly emphasized the importance of having structured and comprehensive briefing from the instructor prior to the DST-making experience. Sharing some tutorial links and showing learners some DST models would be of great help to give them an idea of what is expected to be their final product. In addition, allowing for initial discussion among the learners and with the instructor would help learners estimate the amount of work to be put for creating a digital story.

4.5.3 Perceptions about DST as Regards TPCK

As for Zahid's perceptions towards using technology in classrooms, he foregrounded the importance of integrating technology in all educational settings, including classrooms. He noted that he had been using technological devices in his classroom since the very beginning of his teaching career, including tape recorders, CD players, computers or laptops, language labs and interactive smartboards. These devices proved to be very useful in classrooms. He also believed that teachers should be educated about the importance of integrating technology into classroom in their pre-service education. They should be exposed to the use of technological devices in a principled way. The reason Zahid insisted on educating teachers about technology is to make them aware that technology is not a replacement of teachers' role. "It's only a scaffolding" form, Zahid added.

In terms of using stories, Zahid explained how storytelling, in general, is a very good strategy of teaching. He added that "Stories become more impressive and productive when they have personal touch of the narrator and an applicable, viable message for the audience." However, in each era there is some sort of a trending 'fashion'. And since technology is the most trending in our time, digital storytelling would definitely be very suitable and interesting to use. It could even add to the value of the

traditional storytelling, have more effect and be more productive, as it comprises of two major parts: the story itself and the technical visualization of the story.

On starting the process of creating a digital story, Zahid mentioned that he gained some benefits from the links and guidelines provided by the instructor. These gave him a clear image of what he was supposed to do. However, he claimed that he underestimated the load of work at the beginning, and he attributed this to the lack of details about how to actually make and use the program. He noted that he had to ask for further explanation form the instructor and had asked for extension of the deadline in order to be able to finish what he had planned to do.

During the video-making phase, Zahid had gone through some critical problems. This urged him to contact a friend for help and to consult his sons, who were more knowledgeable in the use of technology. He also reaped some benefits from his peers' support and advice throughout the experience. Some of them suggested programs for him to use such as the Video Maker and Viva Video, but his technical skills did not serve him enough as he had very limited knowledge in such programs and applications. He also mentioned that he struggled with finding suitable photos to include. He wanted to find authentic photos but that was somehow impossible, because the event took place long time ago, where no digital cameras were used yet. Moreover, he talked about the difficulty of synchronizing the audio with the visuals, and the sound control, which seemed a common problem among all the participants in this study. Another challenge Zahid referred to was conveying a comprehensive message in a 4-5 minutes video. He indicated that it was very appealing to cut a story short as it would not be boring for listeners, but it would need more technical skills in order to convey the message not only through words but through visuals as well.

97

Zahid talked about many other technical drawbacks that he had in his video preparation, which he attributed to his lack of sufficient technical knowledge. He noted that all other areas of making the digital story were not difficult, such as choosing the story, writing a script and reflecting on it. It was only the technical aspect that caused him a lot of confusion and consumed the majority of the time given for creating a digital story. He even had to recreate the digital story again, changing some parts of it to finally reach the final video he made. He indicated also that the issue of technology access and its availability might create some serious problems when investing the DST tool, because in some contexts the shortage in technical education is mainly caused due to lack of access to such tools and devices. He finally pointed out that it was a very good idea to use DST for multiple educational purposes; however, instructors need to make sure that the participants have sufficient TPCK to utilize from the DST to the optimum level.

At the end of the project, Zahid finally felt satisfied and was happy with what he achieved. He said "My concept of digital storytelling is no more opaque now and this project utility is increased manifold." Zahid confirmed that he was quite familiar with technology and its benefits, but still he was sometimes afraid of trying very advanced techniques. Such fear was thankfully overcome by using the DST, as he referred in his reflection report:

> I have learnt the lesson that digital storytelling provides a unique opportunity for students to acquire new media literacy and IT skills including capturing and editing digital photos, recognizing different image formats, recording and using audio clips, searching the Web for text and images and using Photo Grid Video to edit. Moreover, digital storytelling can be used to encourage teachers to prepare their own stories for their students. This aural visual technique will be appreciated by the both professional teachers and the learners for its appeal and magnetic effects.

Thus, Zahid did not consider the benefits of the tool to be invested only for improving his TPCK and for his professional development. He was constantly thinking of ways that he could further integrate it into his classrooms later.

4.6 Case #5: Noor

The last case is Noor, a 25-year old teacher, who had an experience of around 3 years in teaching English. Noor, who has a Jordanian background, did not originally plan to be a teacher as she graduated from English Linguistics department. However, she found herself going through the journey of teaching due to the opportunities available for her back in her home country. Noor mentioned in her interviews that she did not take any training courses before she started teaching. Since the educational system in Jordan allows for the graduates of BA start teaching right after their graduation, eventually, Noor had to face many critical incidents that shaped her philosophy and teaching identity.

The incident Noor chose for her digital story, and like those of most of the other participants, occurred during her early period of teaching as she declared. Teachers at the beginning of their teaching journey depend mainly on their theoretical knowledge gained from their education. They tend to follow the advised directions step by step assuming that this would reduce their encounter with complications or bad surprises inside the classroom. Eventually, they learn that teachers need to go through some difficulties in order to make informed decisions and realize the importance of questioning their presumably firm principles. That was the case with Noor, when she was first assigned the role of teacher of English to the 10th graders. Noor explained that when she was given the responsibility of that class, the English curriculum had been changed as well in the same period. Thus, students had to deal with a new

teacher, as well as a new curriculum. Noor also clarified that she was supporting the use of 'L2 only' in the classroom, and she was confident that it was the ultimate way to improve students' English. Because the new curriculum was also designed to be taught in L2 as well, Noor did not even question or think about the possibility of using L1 in the class as her medium of instruction.

As the course started, Noor was determined to use L2 in the class, despite the discontent of the students of what they considered new way of teaching and their claims of not understanding much of the English classes. At first, Noor thought that it was for the best of the students' improvement to go on with the teaching principles she adopted and believed in. However, she kept on feeling that students were not happy in the classes, and sometimes they voiced out their complaints by stating that they did not understand anything and that they would prefer the previous curriculum and the previous teacher. She tried to explain to them the concept of teacher identity, and that teachers cannot be the same all the time, but it seemed quite a big concept for them. Therefore, she decided to stop what she was doing and talk to the students openly. Upon listening to their complaints again, Noor realized that she needed to change her approach for that specific class. She needed to take into consideration their level of proficiency and their psychological readiness to the big changes in the curriculum and teachers' approach. As a result, she allowed some L1 in her classroom for instruction and among students. She tried to communicate more often and more closely by listening to students' feedback. She tried to invest new technologies that students found appealing, such as smart board and using the computerized version of the materials instead of the hard copy. Eventually, Noor stated that she could finally reach to the students both emotionally and educationally, and she could sense the improvement in their skills.

Noor, like all other participants, provided her perceptions towards the DST implementations in light of its use in reflection as a form of professional development, and in light of the TPCK she gained from the experience. In general, Noor was positive about the experience. She clarified how some areas of her knowledge had been developed. Yet, she went through some difficulties that made her take a neutral stance of using this tool in PD for reflection. She also shared some suggestions for better implementation of the DST in future, or for other uses of the tool in education in general and teacher education in particular.

It is necessary to note, though, that at the beginning of the process Noor did not quite get the aim of the DST. She explained that she only tried to speak generally about her experience and reflect on her beliefs and feelings. After sharing her ideas and the earlier version of her digital story, Noor got some feedback form her peers to specify the digital story to one specific incident rather than speaking generally. She took their advice and included a specific incident; yet, she still wanted to highlight her teaching principles and beliefs through the video, which seemed to be fine later as she could reflect on the story and receive some feedback from her peers.

4.6.1 Why This Story?

Noor, at the beginning of the DST implementation, pointed out that she wanted to choose a story or incident that had really moved her. Her focus upon choosing the topic was not only pedagogic and theoretical. She claimed that since one of the aims of DST was to involve listeners, i.e., other teachers and peers, in the story itself and allow them to live the experience and provide their own feedback, she would like to serve that purpose through a meaningful story. However, Noor pointed out in her while-interview that her choice of this specific incident was because she did not have many critical incidents to talk about and reflect on:

> Because actually during my experience I did not face like an actual problem. So I just talked about my beliefs and such specific points during my experience. So there is no actual problem to talk about.

Noor, therefore, preferred to talk about something more general, and to focus more on her beliefs and emotions in the teaching experience she had.

4.6.2 Perceptions about DST as a Professional Development Tool

Noor, like most other novice teacher, came to her class believing that there was a best way to teach English to any classroom, that is, by using L2 in class and as a medium of instruction. The support of using L2 in classroom is quite evident in the current educational systems, and such support is manifested in curricula, materials, and even in the teacher training programs. Novice teachers sometimes fail to consider needs of different students in different contexts. Due to novice teachers' lack of solid experience, they try to adopt what is strongly advised to them through the stakeholders of the educational system, i.e., administrations, publishers, and instructors.

In her reflection report, Noor tried to provide solid evidence from the literature on the validity of using both L1 and L2 inside the classroom. For instance, she referred to Cook's (2001) study, which noted that learners' L1 should be considered. She also made a reference to Atkinson (1993), who considered the mother-tongue of learners is advantageous for many learners. In addition, she highlighted the importance of considering the needs of learners by using their L1 in some specific classroom situations by referring to Mohebbi and Alavi's (2014) study. The participant also tried to use some evidence on the importance of considering the brain function as teachers decide to use L2 solely. She supported her claim by reporting Widdowson's (2003) findings on this specific issue. A crucial finding was also provided by Noor,

stating that the presence of both L1 and L2 in classrooms was inevitable (Chen & Hird, 2006).

On the other hand, Noor provided evidence on the importance of using L2 in classroom by referring to studies from the literature such as those of Krashen (1981), Littlewood and Yu (2011), and McDonald (1993). In each of these studies a supportive element was presented to support the use of L2 in classroom. For instance, Krashan's (1981) comprehensible input hypothesis, which is considered one fundamental basis for many ascending theories and methods, focused on the use of L2 only in classroom as a medium of instruction to improve learners' language skills.

Through the presentation of the ends of the continuum, Noor tried to demonstrate the importance of using both L1 and L2 in classroom, depending on the needs of learners and the context of each classroom. She explained that she believed, even during her previous teaching experience, that using L2 is more efficient. However, it is not always possible to follow this approach due to classroom time limit, and different proficiency levels of students in the same classroom. In her critical incident, Noor pointed out in the reflection report she presented that the use of English only was a problem rather than a technique as it created communication problems with the students:

> Using English in my classes caused lack of communication between me and my students that occurred in the first week of the semester then this resulted misunderstanding problems with my students ended by aversion feelings towards English classes and may be towards me.

Noor believed that communication with students, whether about the subject matter itself or about their emotional aspects, was very crucial for the success of the educational process. Any failure between the teacher and students might create some learning barriers and sometimes lead to failure in student-student interaction. Effective communication, on the other hand, creates a comfortable atmosphere for learning, and hence, improve the learning experience and lead to better learners' outcomes. She related this aspect to her specific critical incident, as she said in her reflection report:

> For me as I spent whole one week without realizing my students' problem, the gap was with my communication skills as I didn't communicate with them in an appropriate way in order to understand their needs at that time, either way I would do a better job if I communicated well with my students.

Noor linked this skill with what she called 'God's endowment' for teaching skills. In other words, she believed that good teachers are usually born with a special ability to teach, like a talent that God gives to some people, but not others. This talent includes the ability to efficiently communicate with students and manage a classroom. She, therefore, did not believe in the need for professional development. She stated, though, that PD is important for teachers to keep up to date with the latest trends and techniques reached, but such programs do not create a teacher or make those who are not good enough better. She referred to several professional development forms she joined in the past, such as workshops and seminars, but she certified that they were of a little help for her.

As a result, she did not consider the DST as an essential tool for reflection: "if you want to reflect on yourself, you will with the storytelling or without". She attributed the efficiency of reflection to the teachers' will, which is also part of their initial

potential of being a good teacher or not at all. Noor pointed out that the experience of DST implementation was of a little help for her in terms of reflection. It only made her 'flashback' into the memories and remember what she did in her classroom and how she did it. However, at the end of the experience and in her reflection report, Noor stated in her reflection report that the DST experience had actually the mirror effect, where she could watch herself objectively and see clearly what she did inside the class:

> Discovering new aspects in my personality as a teacher that I didn't realize before after watching the whole video is one of the things I didn't expect at all even during creating and processing the digital story video as I was one of those who don't accept criticism and who underestimate others opinions.

Noor was another participant, like Merve, who could only realize the real effect of creating a digital story after finishing the product and watching it again objectively. This happened due to the fact that during the process of making the digital story, teachers became so occupied with the technical aspect of the product and slightly forgot about the critical influence of the story.

Noor also mentioned that her peer's feedback and comments had also made her realize some elements of the story, and helped her see the story from their perceptions rather than hers. She pointed out in her post-interview that her peers' experiences were very useful as well: "When you just sit there and see their experiences and yours, you can, like, consider things to do or not to do again." By saying so, Noor intended that watching other teachers' videos do not only help you to learn from others experiences, but also you get a chance to compare between your approach and theirs. Additionally, Noor mentioned the importance of sharing a digital story with colleagues in creating stronger bonds and allowing others to know

about yourself. She clarified how, despite being classmates for a while, they did not know much about each other. As they watched each other's digital stories, they could sympathize with and relate to each other's problems. This makes a DST tool as a good medium for creating collegiality among teacher groups.

On the other hand, Noor emphasized, from the very beginning, the importance of the emotional experience in the DST-making process. She even made her choice of the critical incident by finding a very emotional story during her teaching career. Noor explained that this critical incident was initially an emotional one, as it was about how she could communicate with her students and become one of their favourites at the end. Yet, using this story as a material for her DST added up to the emotional effect. She noted in the reflection report that the nature of the DST and including music to personal narration gave the story a greater value and made it more appealing:

> Mixing soft musical background with pictures and videos of my own real memories and the way of their appearance were very emotional and effective.

However, the experience of creating a DST was not all positively emotional. As Noor was creating her digital story, she went through some feelings of anxiety. She mentioned that the story would not meet the expectation of the instructor, and that she was disappointed in some phases because of the technical hurdles she was facing. Thankfully, these feelings seemed to change at the end of the implementation process. Noor was clearly satisfied with her final product despite the fact that it was long and sometimes difficult to make, as she explained in her reflection report:

> Personally and after doing a full digital story for the first time in my life, I can describe it as a tiresome and interesting process, I described it tiresome because it took long time and hard effort, and interesting as it made me

106

enthusiastic to watch the final result, digital storytelling is a narrative for the others and a mirror for the person who does it.

Noor even considered using the DST tool for her teacher education in the future. She even provided some suggestions for the DST to be successfully invested for different purposes. For instance, she suggested that teacher educators can send implicit messages to novice teachers through these videos when presented in a training program. In this way, educators can use their experience as a model or a lesson to learn from when presented as digital stories. Alternatively, novice teachers can use DST to express the difficulties they face during their early stages of experience, and thus, receive some support from their instructors or feedback from their more experienced peers. She also suggested that DST can be further used inside the classroom to teach certain language areas or skills. Noor also suggested that sharing personal stories of students inside their classrooms brings students closer to each other and encourages discussions in the classroom. She provided one example where students can use DST to talk openly about difficulties they are facing in learning English. This would allow the teacher to be aware of the students' problems, and strengthen their communication.

4.6.3 Perceptions about DST as Regards TPCK

In regards to using technology in education, Noor clarified that she did not actually use technological devices during her school education nor higher education. Yet, she was very supportive for the integration of technology in classroom because it can attract students' attention and raise the level of communication and interaction during the lessons. She also highlighted the importance of using technology to present authentic materials, specifically for providing accurate pronunciation. She noted that she successfully used technological devices and programs in her classroom

repeatedly. For instance, she used smartboards to teach in primary schools, and she benefitted from using YouTube videos in other classrooms. She also chose to teach the computerized (soft) copy of the curriculum when she taught the 10th graders in high school. All in all, Noor believed that technology is an essential part of everyone's lives nowadays. Thus, it is always useful to find ways to effectively implement aspects of technology in education as well.

On starting her digital storytelling-making process, Noor mentioned that she made use of some formal and informal help she sought. As for the formal help, Noor referred to the handouts and samples of digital stories that were provided by the instructor, though some of them were basic and not as she imagined how DST would be, but she could generally base her work on the guidelines and the models. As for the informal help, Noor had to contact one of her knowledgeable friends in Jordan, who was a professional photographer and video editor. She took his advice in regards to the program choice and some tools to be used for a better video. She pointed out that she needed professional advice regarding program choice, because she tried six different programs earlier, none of which could serve her in creating a good digital story. She clarified how some of these programs were only available upon purchase and they were considerably expensive. Other programs had some sort of problems with synchronizing sound or with picture ordering. In the end, and based on her friends' advice, Noor chose Kinemaster to create her digital story with. She also used her snapchat application as a source for some of her photos and videos as she used the mobile application to store her personal and professional electronic diaries.

 As Noor referred before, the process of creating a digital story was somehow tiring for her. She needed around 35 hours in total to finish her final product and she had

faced many complication during the process. Noor described how some aspects of the DST-making were sometimes very challenging. She first talked about writing the scenario and finding a suitable story to report on in her digital story. As mentioned earlier, Noor first seemed to consider her teaching experience in general and the general difficulties in her teaching. She also talked about her beliefs and emotions in the first version of her digital story. Later she was convinced that she needed to narrow down the topic into one critical incident, the thing that took longer time to prepare. Writing the scenario was also another tiresome process as she wanted to portray the story with the best suitable language that can transmit and pass on the feelings she felt then to the audience, i.e., her peers. Additionally, Noor also faced some problems choosing photos to include. She pointed out earlier that she wanted to include real photos of her and her students. Nevertheless, she could not have enough photos that can be related to the incident. She also had to struggle with the photo synchronizing with the audio and in controlling the duration of each photo display, which was also time consuming. Noor also stated that she was not completely satisfied with the quality of the digital story, but she could not find a suitable program available, which can offer all the needed features at once.

On the other side, Noor expressed her contentedness with the whole experience in her final interview, by saying:

> It was definitely helpful to deal with the new applications, how to order things, how to record. Actually, because I did not do not, let me say, use my own voice in this kind of videos, so this was the first time to use my voice.

She even described the experience as a "great experience" as she got to learn new technical skills including video editing, choosing and merging types of musical background, voice recording, managing pictures and videos appearance,

synchronizing audio to visuals, and learning about the types of programs and applications of video editing.

Finally, Noor suggested that a short workshop would be advisable to introduce these new skills and techniques to the users beforehand. This, as she believed, would not only save time, but could help them produce better videos in terms of content as well as appearance.

4.7 Summary

In this chapter, the analysis of data gathered was performed on each participant's response. A thematic analysis was followed by depending on the research questions of the study and each participant's response was analysed separately as an individual case study. Thus, participants' responses were grouped under two main areas: the story chosen and the rational of choosing their incidents, and their perceptions of implementing the DST as a tool of reflection regarding both their PD development and their TPCK improvement.

Chapter 5

DISCUSSION OF RESULTS AND CONCLUSION

This chapter presents the discussions over the results reported in the previous chapter. The data related to the five cases, which were thematically analysed, are synthesized in this chapter to answer the research questions of the study. Additionally, the general trend of perceptions is outlined with regards to using DST as a tool contributing to teacher professional development and TPCK. Then, a conclusion is made, followed by the implications of the current study, the limitations, and suggestions for further studies.

5.1 Discussion of the Results

The perceptions related to the implementation of digital storytelling as a tool for reflection were manifold. In other words, it was perceived differently by the participants, which may be due to different factors such as age, experience, technical knowledge, and personal appeal of the tool. Despite the fact that the majority of the perceptions and attitudes were positive, some shortcomings and difficulties were faced, as well. Below, an overview of these perceptions in line with the research questions is provided.

5.1.1 Research Question #1: What justification has each participant had as regards their choice of stories?

Participants' choice of a specific critical incident among many others that they may have encountered during their teaching career varied, as their perception of the 'worst situation' was different due to several factors such as setting, cultural

background, emotional perception of the event and lessons learned. However, they all were in complete accord in choosing an event that took place at the very beginning of their teaching career, i.e., as novice teachers. This is probably because teachers at the beginning of their teaching practice are mostly affected by critical situations that they face. It is in this phase where they actually start shaping their teacher identity and build their cognition. After completing education, teachers mainly base their beliefs and principles on their theoretical knowledge rather than practical. Until they actually get involved in real teaching practices that they start having some practical grounds to make informed decisions. Thus, they can possibly learn the most from their early years that can be rich with critical incidents. Similar incidents serve as landmarks in teachers' experience. However, it is not until teachers decide to critically look at a certain event and analyse it that they actually can uncover new meaning of the teaching process (Farrell, 2009). Consequently, the participants' choice of incidents that occurred during their first years of experience was not surprising.

In the same fashion, the candidates had some agreements on other areas of their rationale in choosing their stories. For instance, all of the participants believed that the story they reported affected them deeply and contributed to shaping their principles and standards. Some of them had additional justification, such as Ayşe, Zahid and Noor, who thought that reporting such an incident would be involving for other participants and would probably help other teachers in their career. These stories, therefore, seemed to serve the ultimate aim of the DST implementation, which involves reflection and sharing with other colleagues.

On the other hand, the stories of the participants were different in some other aspects. As referred by Farrell (2015), critical incidents might take place inside or outside the classroom. Thus, most of the participants, namely Merve, Ayşe, Darius and Noor, decided to talk about incidents occurred in the classroom and during their instruction, whereas Zahid preferred to talk about an incident that happened outside the classroom setting. He justified his choice by describing the incident to be the most influential in his career, and which served as a cornerstone to the next phase of his professional development.

Considering all the above, it can be concluded that all the participants preferred to choose critical incidents that happened at the beginning of their career path as teachers, as these incidents contributed as the foundation of their current cognition of teaching and their teacher identity.

5.1.2 Research Question #2: What are the participants' perceptions regarding the DST implementation in terms of its use as a tool for: i) enhancing reflection for professional development purposes, ii) improving their TPCK

As demonstrated in the previous chapters, the participants' responses were analysed thematically in line with the research questions. Therefore, the perceptions were basically divided into two main themes: DST's contribution to teachers' professional development, and the DST's role in improving teachers' TPCK. Throughout the interviews the participants were constantly asked about their perceptions with regards to the two themes, and in their reflection reports, candidates also elaborated on these two main themes providing some significant data to answer this question. It is worth noting here that although 'reflection' was the major focus and interest of this study, the perceptions of participants on the use of the DST tool for their professional

development purposes extended to reach other relevant aspects, namely the emotional experience and peer-feedback.

The perceptions demonstrated a range from positive attitudes towards the DST implementation, to negative and sometimes neutral. As can be seen from Table 5.1, the general trend of the candidates' responses was mainly positive. Darius's perceptions, contrastingly, seem to stand out as very negative. Some of the neutral attitudes were expressed by Merve, with regards to the emotional experience, and Noor, in terms of reflection.

Table 5.1: Trends in Participants' Perceptions

| Participant | Professional Development | | | TPAK Knowledge | Use of DST in Future Teaching |
	Reflection	Emotional Experience	Peer-Feedback		
Merve	Positive	Neutral	Positive	Positive	Positive
Ayşe	Positive	Positive	Positive	Positive	Positive
Darius	Negative	Neutral	Neutral	Negative	Negative
Zahid	Positive	Positive	Positive	Positive	Positive
Noor	Neutral	Positive	Positive	Positive	Positive

In general, that DST implementation as a reflection tool was found to be relatively useful and advisable. Additionally, the results suggest that DST can be successfully implemented to teacher training programs to improve teachers' TPCK skills and, hence, support technology integration into education.

An elaboration on each of the main themes of this research question is provided below, followed by suggestions for better implementation of the DST tool in future studies.

5.1.2.1 DST as a Professional Development Tool

Participants demonstrated somehow a unanimous agreement in their positive perceptions regarding some areas of their professional development being attributed through the DST implementation. One of these areas is the peer-reflection and feedback. Almost all the participants certified that the DST allowed them to share their stories with their peers and get feedback about the situation they went through and the way they dealt with it. Some of the participants also added that they learned from other teachers' stories and thought about the way they would behave if they found themselves in similar critical situations. Advantages mentioned on the benefits of the peer-feedback included comments such as learning from a more experienced colleague, looking at the event from other perspectives, and boosting their confidence on what they did.

Similarly, participants were also concordant in their perspectives about reviving their emotional experience in teaching and being open about it. Most of the participants asserted that the DST experience gave them a chance to live the incident again and go through the emotions they were through when they first encountered the situation. Telling their story with their own voice, highlighting the prominent aspects of it, and sharing it with others helped them to be open about what happened to them. Some of the participants felt happy and more confident as they appreciated the success they achieved by responding to the incident, while some other participants said that it taught them a lesson and they would behave differently if they were faced with a similar incident now. In either cases, the DST tool proved to be effectively contributing to the participants' comprehension of their emotional experience. Some of the participants, such as Darius, though, were not as much enthusiastic about the

effect the DST tool had in reliving the emotional experience. Darius believed that any other reflectional tool would have similar effect with less effort.

As for reflection, participants were at odds, as their opinions varied on how effective DST was in helping them reflect on their critical incidents. For instance, Merve, Zahid and Ayşe noted that their digital storytelling was a very effective tool in helping them look back at the incident and reflect on it, finding alternative solutions, realizing their deficiencies back then, and recognizing how much these incidents changed them. Noor, on the other hand, denied the deep impact of the DST tool in promoting her reflection on the critical incidents. However, her perceptions shifted towards the end of the implementation and she finally confirmed that it did actually help her look back at the event critically and uncover some hidden meaning of the experience. This can probably be justified by the fact that she was so occupied with the technical aspect of the DST tool at the beginning that she missed the reflectional effect it had. Hence, as she finished with the digital story making, and finally got the chance to watch the video, share it with her peers, and receive feedback, she actually could reflect on her critical incident and gain the most of the DST-making experience. On the other hand, while Darius admitted the reflectional aspect of the DST tool in helping him recall and revive the experience, he did not consider the digital storytelling as the best tool to be used for reflection. He claimed that the DST-making was very time and energy consuming. He would rather, therefore, use a technically less demanding tool, such as PowerPoint presentation or regular storytelling narrative, to tell his story, reflect on it and have feedback from his colleagues.

In accordance with all what is said above, it can be concluded that the DST tool can be a very effective reflectional tool in improving teacher professional development if it is appropriately implemented. Similar results have been obtained by other studies from the related literature. For instance, the study of Tatli, Uğur and Çakıroğlu (2018), which implemented the tool in Information Technology (IT) department, confirmed the benefits of DST in peer-observation and assessments in IT teacher program. In using DST for teacher reflection, the study of Marone (2017) also employed DST in teacher education program. Although the program was not specific to the English language teachers, it reported very consistent and positive results to those of the current research. Similarly, the study of Ivala, Gachago, Condy and Chigona (2014) showed that DST actually encouraged teachers' reflection in a teacher education program.

5.1.2.2 DST as Regards TPCK

The responses of the participants depicted complete agreement of the participants in the fact that the DST tool has definitely added to their technical skills in general. Learning how to use new programs, create and edit videos, synchronize audio and visual media, and add narrative were some of the skills and areas highlighted by the participants as new to their technical knowledge. However, the extent to which these newly learned skills was appreciated by the participants varied. For instance, Darius claimed that using a very specific video-making application, i.e., Moviely, was new; yet, this was not his first experience in creating a video or a movie. He pointed out that if the ultimate purpose was engaging them in reflection about a critical incident, other means such as writing or sharing it in class would serve the purpose as well. Therefore, he did not believe that the DST-making had greatly added to his TPCK, and that it was rather tiring as well.

As a matter of fact, there were many other complications and difficulties reported by all the participants. These included problems with synchronizing audio and visual media, sound volume control, finding appropriate and freely available pictures, finding accessible free programs, controlling the quality level of the video and many other minor technical problems. Nonetheless, facing these difficulties implies that the participants had some deficiencies in these technical aspects, and they were actually learning through the DST-making ways to overcome such deficiencies.

In conclusion, it can be said that the DST tool had definitely added to the participants' TPCK. Participants reported their contentedness with the experience in terms of helping them learn about weaknesses and attempting to improve them, find more economic ways to tell stories, and learn new valuable skills such as narration.

5.1.3 Suggestions for Future DST Implementation

As a researcher, I would like to provide some instrumental suggestions that can ensure a better and smoother implementation of the DST as a reflection tool in future. Firstly, and as all the participants advised, a short training course or workshop can be provided to the participants, introducing them to the tool and training them on some of the basic skills that might be needed in the process. Secondly, suggesting programs and applications to participants prior to the DST-making process would save time and energy, and allow participants to explore the programs beforehand and ask questions if needed. Additionally, one of the participant suggested that it is advisable to distribute the workload of producing a digital story by making it a group work project, where each of the group members can be responsible for one aspect of the DST-making. However, this would require specific attention to the story choice, as it will have to be shared by all the members of the group project.

As for the theoretical aspect of the DST-making, it is recommended to further involve the participants with the decision-making phase by allowing them to decide on topics of interests and areas they would like to report on, rather than limiting them all to one topic, i.e., a critical incident that disturbed them. In other words, learners should have the freedom of choosing topics to report and reflect on. This would improve skills of decision-making, critical-thinking and autonomy. In this vein, it is also recommended that teachers should learn how to reflect on their teaching before they practically start their teaching career. Thus, integrating DST to teacher training programs and teacher education would be of a great benefit for their reflection and technical skills, simultaneously. Finally, having a longer time frame for creating a digital story would ensure better results, especially if participants are new to the tool.

The participants have also provided some other suggestions related to in-class use of the DST tools, such as investing the DST as a group project, or using it to improve learners speaking and listening skills. However, these ideas are not listed among the suggestions for this very specific implementation, because it targets teacher professional development and reflection.

5.2 Conclusion

This study aimed to investigate the perceptions of a group of teachers about their experience of digital storytelling as a tool of reflection in contributing to teachers' professional development and their TPCK. For this purpose, the researcher collected data qualitatively from five participants, each of whom was considered as an individual case study. The tools used for data collection were semi-structured interviews and reflection reports. Participants were specifically asked about their

perceptions of the DST implementation process, focusing on the strengths, and shortcomings of the tool.

Findings of the study showed that digital storytelling is relatively a successful tool when employed for reflection in teacher professional development. The findings highlighted three fundamental aspects that the DST tool mostly addressed in teacher professional development, namely reflection, peer-feedback, and emotional experience of teachers. Moreover, the findings also manifested improvement in teachers' TPCK as a result of their involvement in the DST-making process.

Suggestions were made by the participants of this study to improve the DST implementation in future program. Additionally, the suggestions included some other educational settings, such as classrooms and conferences, where the tool can be invested for reflection and critical thinking purposes.

To encapsulate, the study found that the positive perceptions of the majority of the participants support the use of the DST as a tool in teacher education and professional development.

5.3 Implications of the Study

Based on the findings of this research, several implications can be outlined. Since the use of digital storytelling for professional development is relatively new, this study provides some evidence on the success of implementing the DST tool in teacher education and professional development setting for English language teachers. Additionally, it is implied from the results that using critical incidents, which occur inside and outside classroom, as subjects of the digital stories is quite positive and

can lead to substantial benefits in terms of reflection, exploring the emotional experience, and promoting peer-reflection, collaboration and feedback.

Another implication of the study is that DST could be a very useful tool if implemented as part of the curriculum in teacher training and education programs. By employing the DST tool in similar programs, instructors and other stakeholders, such as administrators or trainers, can address both teachers' TPCK and analytical skills.

5.4 Limitations and Delimitations of the Study

The study has reached some substantial results supporting its aim; however, a number of limitations have been faced due to certain contextual and time frame conditions. The first limitation is the small number of the participants in this study. Results would have been more reliable if the study included a larger number of participants. However, this was an inevitable shortcoming as the study was based on an already existing program, rather than implementing the process on an independent group of teachers involving in professional development programs. The small number of participants, on the other hand, enabled the researcher to collect in-depth data from them via thee interviews (pre-, while-, and post-interviews of DST) as well as reflection reports, written in detail by the participants. This may have contributed to the validity and reliability of the data in terms of its truth value.

The second limitation is related to the generalizability of the data due to the type of the research design adopted for the study, i.e., qualitative study. The researcher initially was planning to conduct a mixed method study, including questionnaires, interviews and reflection report. Yet, due to the limited number of the available

participants (5 in number), the researcher sought the qualitative mode for this study. Nevertheless, the researcher tried to compensate for this limitation by turning the research into a case study, where each of the participants was considered a separate case, and the data was collected from them thoroughly.

A third limitation can be added is that the only PhD candidates, who were registered in the ELT program, were involved in the study. This was due to the fact that DST is relatively new to the context of TRNC, and it would be challenging, if not impossible, to find other participants who are involved in DST-making as a tool of reflection. As a matter of fact, this is one of the elements that added value to the study, as it was a first of a kind in the literature, as referred in the implication section above.

5.5 Suggestions for Further Studies

In line with the limitations referred to above, some suggestions can be made for other studies in the same field, so that they would obtain clearer and more detailed results. Firstly it is recommended to have a bigger number of participants for generalizability purposes. Consequently, this would allow scholars to utilize other data collection tools, such as questionnaires, and hence, lead to more accountable results. Another suggestion is to consider a more flexible program, such as a teacher training program. This would give the participants a more flexible time frame for the DST to be created, and it would allow the researcher to seek a larger number of participants. It is also recommended that future research give the participants broader topics to choose from and reflect on. Attributing teachers' interests and needs can involve them more in the process and promote their motivation to carry on with the demanding requirements of making a digital story.

5.6 Summary

This chapter included some of the major parts related to the discussions of the results. First, it presented the discussions of the results by answering the research questions. After that, the implications of the study were detailed, followed by the limitations and the suggestions for further research.

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APPENDICES

Appendix A: Ethics Committee Approval Letter

Eastern Mediterranean University

Doğu Akdeniz Üniversitesi

Etik Kurulu / Ethics Committee

Reference No: ETK00-2019-0053   27. 02.2019

Subject: Application for Ethics

RE: Bayan Souf

Department of Foreign Languages

To Whom It May Concern:

On the date of **27.02.2019**, (Meeting number **2019/07-33**), EMU's Scientific Research and Publication Ethics Committee (BAYEK) has granted, Bayan Souf from the, Department of Foreign Languages to pursue with her Ma. thesis work **"The role of digital storytelling in English language teachers' professional development."** under the supervision of Prof. Dr. Ülker Vancı Osam. This decision has been taken by the majority of votes.

Regards,

Prof. Dr. Fatma Güven Lisaniler

Director of Ethics Committee

FGL/ns.

Appendix B: Consent Form for Interviews

Consent Form for Interviews

Dear Participant,

You are kindly invited to take part in the research entitled "**The Role of Digital Storytelling in English Language Teachers' Professional Development**", which is designed to find out how digital storytelling can contribute to teachers' professional development in general. If you agree to participate in this research, please fill in the consent form below and answer the questions that will be asked by the researcher as sincerely as possible.

The study is designed to carry out three interviews with each participant: pre, while, and post interviews. Each of these interviews is estimated to last for about 15-20 minutes, and will be voice-recorded for the sake of transcription. The data collected will be used for academic purposes only and will be kept confidential. I would also like to ensure you that your grades will not be affected in any way and you can withdraw from the study whenever you want. By signing the consent below you agree to participate in a recorded interview and potentially answer follow up questions. You may choose not to answer any questions that you find embarrassing or offensive. Your participation is completely voluntary and you may refuse to participate or discontinue at any time without loss of benefits.

Extracts from the interview from which you would not be personally identified may be used in any conference presentation, report or journal article developed as a result of the research. No other use will be made of the recording without your written permission. And that no one except the researcher and her supervisor will be allowed access to the original recording. Further information can be obtained directly from me or my thesis supervisor.

Thank you for your participation and contribution.

Ms. Bayan Soufi	**Prof. Dr. Ülker Vancı Osam**
MA Student	MA Thesis Supervisor
Department of Foreign Language Education	Department of Foreign Language Education
Faculty of Education	Faculty of Education
Eastern Mediterranean University	Eastern Mediterranean University
E-mail: bayansoufi@gmail.com	E-mail: ulker.osam@emu.edu.tr

✂..

Consent Form

I confirm that I have read and understood the main purpose of the interviews, and how my answers will be used. Thus, I agree to take part in this interview.

Name- Surname: -------------------------------------

Signature: -------------------------------------

Date: -------------------------------------

Appendix C: Consent Form for Reflection Reports

Consent Form for the Reflection Report

Dear Participant,

As a partial fulfillment of my M.A. study in English Language Teaching department at Eastern Mediterranean University, I am investigating the role of digital storytelling in English language teachers' professional development. For this purpose, I ask the participants to provide a written reflection report, stating their opinion, benefits, elaboration and suggestions on their experience of creating a digital story for the purpose of their professional development.

If you agree to participate in this research, please fill in the consent form below. All the information you provide will be kept completely confidential and used only for the purposes of my study. The data gathered will be used for academic purposes only and will be kept confidential.

Thank you for your participation and contribution.

Ms. Bayan Soufi
MA Student
Department of Foreign Language Education
Faculty of Education
Eastern Mediterranean University
E-mail: bayansoufi@gmail.com

Prof. Dr. Ülker Vancı Osam
MA Thesis Supervisor
Department of Foreign Language Education
Faculty of Education
Eastern Mediterranean University
E-mail: ulker.osam@emu.edu.tr

✂...

Consent Form

I confirm that I have read and understood the main purpose of the reflection report and how my writings will be used. Thus, I agree to share my reflective writing with you for the research purposes.

Name- Surname: -------------------------------------

Signature: --

Date: --

Appendix D: Interview Questions

<u>Interview Questions</u>

Pre-interviews

1. How long have you taught / been teaching English?

2. What is your teaching philosophy? Beliefs? Values? Principles?

3. Have you ever used technology in in classroom or for your Education?

4. What are your current beliefs about the role of technology in teaching English? Do you have positive or negative attitude in general? Why (not)?

5. What are your current beliefs about the role of technology in pre-service / in service teacher education?

6. What do you recall about your experiences of teaching English using technology at schools? Please share any anecdotes you have.

7. What are your previous involvement in professional development? What kind/forms of activities have you been engaged in?

8. How important is professional development in helping you crystalize your teaching beliefs and reaching your educational goals? Please provide your answer in light of your response to question #2.

9. What do you think digital storytelling is about? Have you ever used this technique in general? In teaching? In your personal education or professional development? If yes, how?

10. What do you expect to achieve by being engaged in this digital storytelling experience?

While-interviews

1. What programs, tools, or techniques are you using for creating your personalized digital storytelling?

2. What are the difficulties/problems you are facing during this process?

3. What are the difficulties anticipated for later stages?

4. Are you receiving any formal or informal support for implementing the digital storytelling?

5. Has the process met your expectation so far?

Post-interviews

1. What is your opinion of the whole digital storytelling process?

2. How do you describe the process of using digital storytelling as a reflection tool?

3. Did the experience help you realize, change, or discover new areas of your beliefs as a teacher?

4. How did the digital storytelling process help you look at your own teaching?

5. How did this experience contribute to you emotionally?

6. How did this experience contribute to your professional development?

7. How did this experience contribute to your pedagogical knowledge?

8. How did this experience contribute to your theoretical knowledge?

9. How did this experience contribute to you technically?

10. What are your suggestions for further use of digital storytelling in education in general? In classroom? In teacher education and professional development?