ESOL pre-service teachers' experiences and learning in completing a reflection paper and digital storytelling

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This qualitative study investigated how pre-service teachers of English for Speakers of Other Languages (ESOL) experienced and learned from their completion of a reflective project, including a reflection paper and digital storytelling. The participants were 20 graduate students in a program for Teaching English to Speakers of Other Languages (TESOL) at a university in the United States. This study aimed to identify participants' experiences when completing the project and its influences on their learning. The findings demonstrated their diverse performance and perspectives during the tasks, as well as their learning in language, culture, education, and technology. Based on these findings, dialogic hybrid learning and the pedagogical implications are discussed.

Introduction

Students' roles in education vary depending on educational approaches and contexts. Communicative approaches and sociocultural theory underscore the value of students' active participation and autonomous, self-regulated learning (Brown & Lee, 2015), and a variety of meaningful tasks are necessary to facilitate such learning. Zimmerman (2008) defines self-regulated learning as follows:

> Self-regulated learning (SRL) refers to the self-directive processes and self-beliefs that enable learners to transform their mental abilities, such as verbal aptitude, into an academic performance skill, such as writing. SRL is viewed as proactive processes that students use to acquire academic skill, such as setting goals, selecting and deploying strategies, and self-monitoring one's effectiveness, rather than as a reactive event. (p. 166)

In addition, providing opportunities, including reflective tasks, to make connections between students' prior knowledge and experiences and new knowledge is essential to making this process meaningful. Reflective tasks, such as a journal assignment and a reflection paper, enable learners both to learn core course content and to understand its importance in the real world (Brewer & Jozefowicz, 2006). Based on a review of Dewey's works, Rodgers (2002) defines reflection as follows:

> Reflection is … a tool or vehicle used in the transformation of raw experience into meaning-filled theory that is grounded in experiences, informed by existing theory, and serves the larger purpose of the moral growth of the individual and society. (p. 863)

Digital technology can enhance this reflective process because learners can access and use diverse multimedia resources. I adopted digital storytelling, a technologically mediated task, as one of the reflective assignments. Like a reflection paper, digital storytelling enables learners to review core course content and make their learning more meaningful through real-world experiences (Sadik, 2008).

I designed a reflective project for a graduate-level education course for pre-service teachers of English for Speakers of Other Languages (ESOL) and adopted a reflection paper and digital storytelling as core tasks for a part of the project. The required course, *Language and Culture*, explored the students' critical understanding of diverse linguistic and cultural concepts and phenomena. I believed that self-reflection would be significant for their learning and that it would also enhance their higher-order thinking skills, such as applying what they learned from the class to different contexts and synthesising their knowledge and experiences. In addition, it was critical for the pre-service teachers to learn important content and concepts related to language, culture, and education.

Theoretical framework

Dialogism

When the participants were engaged in a reflective task, they entered into a dialogic relationship with their own preceding and current utterances, which is in keeping with Bakhtin's theory of dialogism (1986). I adopted Bakhtin's (1986) notion of dialogism as a theoretical framework for understanding pre-service teachers' experiences of, and perspectives on, completing a reflective project. Since literacy is a dialogue between a reader or a writer and the text within a social context (Rosenblatt, 1986), dialogue is critical in any activity that requires literacy. According to Bakhtin (1986), "Two speech works, utterances, juxtaposed to one another, enter into a special kind of semantic relationships that we call dialogic" (p. 118). For Bakhtin (1981, 1986), every utterance has a dialogic relationship with preceding and future utterances. In this study, pre-service teachers reflected on their linguistic and cultural knowledge and experiences as preceding utterances to discuss their understanding of the issues as current and future utterances for the reflective project. Therefore, the dialogic interactions with themselves played a significant role in the reflection processes, which worked in both the reflection paper and digital storytelling. Based on the Bakhtinian perspective, I considered ESOL pre-service teachers as active and critical participants in new reflective literacy environments and that their reflections would be dialogic. With this dialogic lens, I focused on ESOL pre-service teachers' experiences and learning when interacting with their preceding utterances.

Literature review

Digital storytelling

Digital storytelling refers to the act of telling a story by using digital technology in virtual environments (Kobayashi, 2012). Robin (2008) also defined it as "a technology application 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" (p. 222). To complete the digital storytelling, storytellers select and compose a summary of topics, concepts, or problems related to their project. They then bring pictures, develop scripts, write descriptions, and arrange these into a storyline (Sadik, 2008). All these components and steps make digital storytelling a comprehensive literacy activity.

Digital storytelling uses low-cost digital cameras, non-linear authoring tools, and computer devices to create short multimedia stories (Meadows, 2003), so learners require a basic level of computer literacy. Digital stories usually contain narrative scripts, still photos, short video clips, and music (Castañeda, 2013; Cushing & Love, 2013). They adopt a form of personal narrative and are presented as short digital media to share personal stories, histories, and voices (Davis, 2004). Although digital technology is used, digital storytellers spend far less time learning and using technology than crafting, revising, and narrating their stories (Banaszewski, 2002).

Beyond the technological applications and the act of telling a story, digital storytelling refers to video communication that incorporates multimedia resources with a rich narrative. It can be a meaningful learning experience for a variety of content areas across a range of educational levels, from kindergarten to university (Lambert, 2013; Robin, 2008; Shelton, Archambault, & Hale, 2017). Digital storytelling enables computer users to collect, create, analyse, and combine visual images with written text, and helps them become creative storytellers (Burmark, 2004; Robin, 2008). These processes involve a high degree of information literacy, critical thinking, and creativity, and the results reflect the storyteller's knowledge, experiences, values, and imagination (Farmer, 2004). In this paper, I use the term *digital storytelling* to refer to the dialogic and reflective task of telling stories by using diverse technology in the educational contexts of electronic literacies.

Digital storytelling in education

As an innovative practice for capturing and sharing life stories, digital storytelling gives students a voice. It enhances their deeper engagement with content, critical thinking, and technological skills, all of which are important for their information literacy (Shelby-Caffey, Úbéda, & Jenkins, 2014). Compared to conventional moviemaking, digital storytelling is more purposeful and artful, so it motivates students to write and tell their stories to others more. In these ways, digital storytelling enables students to gain confidence in their writing skills and to develop new literacy skills (Kajder, 2004; Ohler, 2005; Sylvester & Greenidge, 2009). It also enables students to develop their identities as authors, directors, artists, screenwriters, and designers, and to feel a sense of ownership in their personal stories (Davis, 2004; Davis & Weinshenker, 2012; DeGennaro, 2008; Kajder, 2004).

Teachers who adopted digital storytelling in their classes also emphasized its benefits and effectiveness in enhancing students' skills in presentation, research, organization, writing, and managing technology. In addition, the teachers valued students' motivation and engagement in the process of digital storytelling (Dogan, 2007). The teachers observed that their students developed a personal connection with school assignments and improved attitudes towards schooling after completing digital storytelling tasks (Chung, 2007).

Digital storytelling in teacher education

Digital storytelling is used in teacher education as well. Many pre-service teachers are positively disposed towards digital storytelling and are willing to use it in future classes (Kobayashi, 2012). Their openness towards educational technology improved with the experience of digital storytelling (Heo, 2009). When familiarising pre-service teachers with educational technology, activating and transferring their prior knowledge and skills about technology was as important as teaching them how to use particular technological tools in class. Digital storytelling helps pre-service teachers transfer their personal technical knowledge and skills to educational contexts. However, instructors and pre-service teachers do not need to be fully competent in using technology (Banaszewski, 2002; Kobayashi, 2012).

Due to its educational potentials, researchers have conducted numerous studies on the use of digital storytelling. However, research about its integration as part of a reflective project in graduate-level ESOL pre-service teacher education and the influences in learning about language and culture as content knowledge is scarce. This study shows how a reflection paper and digital storytelling facilitated ESOL pre-service teachers' learning of core concepts and enhanced their linguistic and cultural awareness, which enabled them to understand their critical responsibilities as teachers.

Research questions

The purpose of this research was to identify ESOL pre-service teachers' experiences upon completing a reflective project and its influences in their learning. To better understand teachers' experiences and learning of core content knowledge of language and culture through a reflective project, I addressed two research questions:

(1) How do ESOL pre-service teachers perform when they complete a reflection paper and digital storytelling?
(2) What are the influences of completing a reflection paper and digital storytelling on ESOL pre-service teachers' learning?

Research method

This qualitative study investigated graduate-level ESOL pre-service teachers' experiences and learning of language and culture, as their core content knowledge, when completing a reflective project. This project was

composed of a reflection paper and digital storytelling. The following sections describe research contexts, data collection, and data analysis.

Contexts

The participants were 20 ESOL pre-service teachers at a university in the southeastern area of the United States who were enrolled in a graduate-level course, *Language and Culture*. The course covered diverse linguistic and cultural topics, such as class, race, gender, dialect, bilingualism, and multilingualism. Two of the course objectives were to enhance students' awareness of cultural and ethnic influences regarding the nature of language, and to reinforce their understanding of linguistic and cultural theories, which will assist them in developing intercultural and pedagogical skills. The participants were 7 male and 13 female students, and they were 27 years old on average. Fifteen participants were not confident in using technology in academic teaching and learning. Eighteen participants had never created digital stories before; two had created videos in a different class. The participants signed the informed consent forms after the semester was over. Table 1 presents an overview of their demographic information, and all names of the participants are pseudonyms.

Table 1
Participants' information as of December 2014

	Name	**Gender**	**Age**	**Country of origin**
1	Omar Rahal	M	25	Saudi Arabia
2	Ahmed Safar	M	28	Saudi Arabia
3	Saad Abadi	M	27	Saudi Arabia
4	Abdullah Kalb	M	26	Saudi Arabia
5	Myriam Antar	F	24	Saudi Arabia
6	Nadia Amari	F	25	Saudi Arabia
7	Kacey Brown	F	23	United States
8	Chao Wang	M	28	China
9	Rachel Martin	F	25	United States
10	Patricia Miller	F	33	United States
11	Fang Yang	F	34	China
12	Silvia Pérez	F	32	Venezuela
13	José Fernández	M	27	Venezuela
14	Linda Smith	F	25	The United States
15	Soria Gómez	F	28	Mexico
16	Karen Williams	F	23	United States
17	Betty Taylor	F	24	United States
18	Donna White	F	23	United States
19	Laura Thompson	F	29	United States
20	Deborah Hall	F	33	United States

Data collection

In the fall of 2014, the participants completed a reflective project as a major assignment of a graduate-level ESOL education course, *Language and Culture*. As the final project of the course, the participants completed two main tasks: (a) a paper-based reflection paper and (b) digital storytelling. For the reflection paper and digital storytelling, they chose two topics about language and culture, which were related to the content that was covered in class. For the reflection paper, they were to tell their stories about language and culture in a traditional essay format, and the paper had to be double-spaced and 4–5 pages in length. For digital storytelling, the participants told their stories, 2–3 minutes in length, about another topic in a digital storytelling format.

For both tasks, I gave instructions on the goals and the required contents, such as clear arguments and descriptions, supporting examples. However, instruction about the specific organisation for each task was minimal to allow them creative freedom when writing. Instead, I provided a series of questions to help the participants consider what to include in each task. The participants were encouraged to organise the tasks based on their preferences and to support their arguments. The tasks were further distinguished by additional directions about the technology for digital storytelling and the required formats. Regarding the technology, I briefly introduced specific software applications, such as Microsoft PowerPoint, Gimp, Irfanview, Audacity, Windows Movie Maker, iMovie, and Avidemux, in class, and the participants used PowerPoint, Audacity, Windows Movie Maker, and iMovie. However, they learned how to use specific applications by watching YouTube videos that various YouTube users created. The participants could also use different applications, tools, and equipment if they so chose. Grades were not determined by the quality of the technology. Figure 1 is a screenshot of Deborah's digital storytelling task.

Figure 1. A digital storytelling sample

After completing the reflection paper and digital storytelling, the participants submitted a project report and then gave a 10-minute presentation. In the project report, which had to be double-spaced and 2–3 pages long, the participants described their experiences of completing the reflection paper and digital storytelling. During the presentation, they discussed the linguistic and cultural topics of their two tasks and shared their experiences of completing the project. This presentation was recorded with a digital voice recorder for the purpose of evaluation. All these data sets were subsequently collected.

Data analysis

For data analysis, I adopted a conventional approach to qualitative content analysis (Hsieh & Shannon, 2005). As a widely used research technique, content analysis refers to a systematic and replicable way to compress many words of text into limited content categories based on a coding process (Hsieh & Shannon, 2005; Schreier, 2013; Stemler, 2001). To enhance the data preparation and analysis processes, I used Atlas.ti, a Windows-based computer software application for qualitative data analysis, and carefully organised the multiple data sets. To analyse these systematically, I modified the analysis procedures that Miles, Huberman, and Saldaña (2013) suggested. The specific procedures were (a) reviewing the data; (b) deciding on the

criteria to code based on the research questions; (c) coding all the data; (d) revising the codes; (e) developing categories and sub-categories based on semantic relationships and thematic patterns; (f) revising categories and sub-categories; (g) repeating steps (c)–(f) until meaningful codes and categories emerged; and (h) renaming or relocating the categories and sub-categories. Table 2 lists the codes and themes that were used for the data analysis; insignificant codes were not included.

Table 2
A codebook

	Codes	Themes	Criteria
1	Introduction-explicit	Organisation	Performances
2	Body-explicit		
3	Conclusion-explicit		
4	Introduction-implicit		
5	Body-implicit		
6	Conclusion-implicit		
7	Paragraph-irrelevant		
8	Paragraph-unclear		
9	Example-personal	Details	
10	Example-general-culture		
11	Example-general-universal		
12	Example-theoretical		
13	Voice-formal	Expressions	
14	Voice-formality-neutral		
15	Voice-informal		
16	Challenge-genres	Challenges	Experiences
17	Challenge-technology		
18	Challenge-typing		
19	Challenge-writing		
20	Challenge-grammar		
21	Challenge-content		
22	Challenge-organisations		
23	Challenge-examples		
24	Learning-linguistics	Potential	Experiences/Perspectives
25	Learning-culture		
26	Learning-technology		
27	Learning-life		
28	Learning-education		

As an example of coding, I assigned, *challenge-technology* as a code to Silvia's comment, "[Digital storytelling] was challenging for me as well. I had a very limited experience in creating a video project and no experience with this type of project before." In addition, I left a note to her comment, "she experienced difficulty due to her limited experiences of electronic literacies," to acknowledge the participant's struggle. Overall, I had 45 codes, but I selected only 28 meaningful codes, as in Table 2. After the coding procedure, I refined the interpretations of the data, reviewed the participants' performance for the reflection paper and digital storytelling, and identified the influences of completing the reflective project in their learning of language and culture. For steps (a)–(g), I asked a colleague, as a critical friend who was also familiar with relevant topics and methods, to code a portion of the data (Rossman & Rallis, 2012) and determine whether my coding was reasonable. If there was any discrepancy, we discussed it until we agreed on the codes and themes. I afterward conducted further analyses within and across the categories and constantly scrutinised the results for emerging themes. *Organisations*, *supporting details*, *formal/informal expressions*, *challenges*, and *potential of the reflective tasks* were the five themes for the performance of, experiences with, and perspectives on the participants' reflection paper and digital storytelling. One additional theme (*potential*) was reused as the influence of completing the reflective project. To facilitate the study's trustworthiness and

transferability, I triangulated the data collection and analysis to identify converging patterns (Lincoln & Guba, 1985). While analysing the data, I also communicated with the participants via email and conducted member checks to confirm my interpretations of the data.

Findings

ESOL pre-service teachers' performances of the reflective tasks

For the reflection paper and digital storytelling, the participants performed similarly in some aspects, but differently in others. To identify these patterns, I focused on the participants' performance of the two tasks. In addition, the project report and presentation showed their experience with, and perspectives on, the reflective project. The first three themes (organisations, supporting details, and formal/informal expressions) concerned the participants' performance; the last two themes (challenges and potential of the reflective tasks) were relevant to their experiences and perspectives. However, these themes were interrelated, so participants' experiences and perspectives influenced their performance and vice versa.

Organisation
When writing the reflection paper and developing digital storytelling, the participants organised the tasks similarly. All of the participants included an introduction, body, and conclusion for both tasks explicitly or implicitly. For the reflection paper, for example, 15 participants explicitly used subheadings for these sections; five did not, though the three sections were implied. This structure applied also for digital storytelling, though none of the participants included explicit subheadings. The participants organised their tasks this way to make them more systematic and for clarity.

The participants regarded the reflection paper as a typical essay-type writing assignment, so their prior writing experiences made them feel more comfortable and confident when writing the reflection paper. However, the participants still had to follow specific requirements to facilitate the paper's reflectiveness. For example, the participants had to select appropriate topics, organise the stories effectively, and provide meaningful examples to strengthen their stories. During his presentation, Ahmed said:

> I'm familiar with the [reflection paper], but the problems were what topic I should select and how I could write about it well. As far as I know, I should include introduction, body, and conclusion in the paper to make [the paper] look more professional. And specific examples to support my arguments and statements. (Presentation)

While participants' writing experiences were a significant resource for completing this task effectively, they considered digital storytelling to be more than a writing task and were unsure how to organise their stories in a digital format. To solve this problem, they transferred their knowledge about the genre and experiences in writing, including writing the reflection paper, to the task of digital storytelling. Saad said:

> Since this was the first time for me to make digital storytelling, I was not sure what to put where and how. But I assumed that the organisation for [the reflection paper] would work for [digital storytelling] as well because they are both reflective activities. (Presentation)

Even though most of the participants did not know how to deliver their messages effectively and how to organise their stories while developing digital storytelling, they transferred their prior knowledge and experiences to the new literacy task. This strategy enabled them to become more active writers and storytellers. This eventually made the overall organisation of both reflective tasks look similar as well.

Supporting details
For both tasks, supporting details played a significant role in the participants' performance and facilitated the dialogue with themselves. In other words, the participants reflected on their prior knowledge and experiences as preceding utterances. Since including appropriate examples for the reflective project was recommended, all

of the participants offered either general or personal ones, or both, to strengthen their stories. For example, Fang included general examples in her reflection paper as follows:

> "山," the mountain in English, we created the word "mountain" by drawing the shape of mountain at the beginning. Gradually, the characters have been changing into more simple ways, which could help people to understand and write, then the word turned to the way it is.
>
> Also, the word "Love" is "爱" in Chinese. People use their hearts to love. Therefore, in Chinese traditional characters, the word love has a heart under the head of the word. (Reflection paper)

Instead of sharing her personal and unique experience, Fang described how Chinese people created words in general and what they meant in her paper. In contrast, Rachel shared a personal example in her digital storytelling:

> One day at lunch with my host family, I was trying to tell them about cultural norms in the US. I couldn't think of a word and the relevant traditions, so I turned to my American roommate to ask her for help. She laughed at me and chided me for not knowing the word after three years of college Spanish. Her comments killed my confidence, and I found that I couldn't think of anything I wanted to say after that. This was one of my first experiences with foreign language anxiety, and I realised how debilitating it can be. (Digital storytelling)

Sharing personal experiences was more subjective than sharing general examples. Regarding the supporting details, Rachel said:

> The reflection paper was very objective for me. I looked at facts and researched information as well as others' opinions about AAVE as an American English dialect. I presented the information in a factual format … Conversely, my preparation of digital storytelling consisted almost entirely of reflections on my own experiences to present in a story form. (Project report)

Like other participants, such as Saad and Karen, Rachel considered the reflection paper a formal task, which should contain objective, informative, and factual details. However, she assumed that personal reflections and experiences would strengthen her digital stories.

Of the participants, 13 shared general examples, and 17 included personal examples in their reflection paper; 10 participants shared general examples, and 17 included personal examples in their digital storytelling. I counted the overall number of participants who used general or personal examples, though the number of examples in each task and further statistical analysis were not considered at that time. Therefore, if a participant used his/her personal examples in the reflection paper, this was counted as one. If a participant used both personal and general examples, this was counted as one for each criterion.

Due to their individual perceptions of each task, the participants selected different types of examples to support their arguments or descriptions. Since more participants identified the reflection paper as a formal assignment, they made connections between the topics, on the one hand, and general and objective examples, on the other. However, they understood that digital storytelling is a less formal assignment, so personal and subjective examples and experiences were sufficient to support their stories.

Formal/informal expressions
The participants' understanding of the formality of the tasks also influenced their expressions. Since the participants considered the reflection paper to be a typical and formal assignment, they used more formal expressions to complete the task. However, they regarded digital storytelling as a different and informal assignment, so they used more casual expressions. Saad said:

> We often have assignments like [the reflection paper] for different courses, and they are pretty serious. So, I tried to write an academically acceptable paper for the first task … [Digital

storytelling] was different from normal assignments; it was more flexible and casual. (Project report)

This *academic acceptability* was clearly seen in another participant's paper as well. In her reflection paper, "Prescribing English", Karen wrote:

> During this semester, we have discussed a variety of topics related to language and culture. We have also completed several assignments that have increased my understanding about the influences of culture on language and vice versa. One of the projects we were assigned was to conduct an ethnographic observation. Because of my interest in medical English and English for nursing, I chose to conduct this observation in a hospital setting. … Now, I would like to take this topic a bit further and explain what I have learned about linguistic and cultural considerations in a different medical setting: an inpatient hospital setting. In this paper, I will explain the significance of the topic, and I will report in narrative form some significant experiences of cultural issues in an inpatient hospital setting. Additionally, I will offer some suggestions or future considerations regarding these topics. (Reflection paper)

This was the introduction of her paper, and Karen, giving specific background information, described her topic and reason for selecting it. She clearly explained how she would organise her paper and what information would be included. In addition, Karen used formal and complete expressions throughout her introduction, which showed her formal voice and attitude. In contrast to the reflection paper, her digital storytelling task titled "Email etiquette: To teach or not to teach?" began with the following paragraph:

> So today I'm here to talk about Email Etiquette: to teach or not to teach? The reason why I chose this topic was because we discuss a lot about this topic in our course Language and Culture this semester and I also have my own experiences with email etiquette. One of the first example as a teacher in a Community College setting in the Boston area, I overheard another professor in the hallway scolding the student for not addressing him properly in an email. (Digital storytelling)

In contrast to her reflection paper, Karen started her digital storytelling with brief descriptions of her topic and with an explanation that she selected it on the basis of her personal experience. The section had only three sentences with limited details and with more casual expressions than Karen used in her reflection paper.

Challenges

Although the participants appreciated both reflective tasks, they addressed several challenges. All noted familiarity with writing a reflection paper, but only two participants answered that they were familiar with digital storytelling. This unfamiliarity, together with the mode of delivery, presented participants with challenges as they developed digital storytelling. For example, José said, "[Digital storytelling] was a very interesting tool, but I was very frustrated because I worried about how to use Windows Movie Maker. I was not a technology savvy person, and it was not even a computer class." His limited knowledge about particular software applications caused concerns and struggles at the beginning of the semester. While most participants learned how to use the applications from YouTube videos, the technology was still challenging.

More challenging still were the tasks of delivering messages to others effectively and establishing meaningful dialogues with their audience. Silvia said:

> [Digital storytelling] was challenging for me as well. I had a very limited experience in creating a video project and no experience with this type of project before. I watched a sample digital storytelling video, but I was not sure yet how I could tell my story effectively. (Presentation)

Therefore, the participants were concerned with both using technological tools and creating significant and meaningful utterances. Meaningfulness was also an issue when writing the reflection paper. Although most participants were familiar with the reflection paper, they mentioned the complexities of discussing linguistic

and cultural topics in education, and the difficulty of strengthening their arguments and statements. Deborah said:

> Completing the reflection paper was a challenge to me. It forced me to think of new ways to communicate with others who would possibly be reading my paper and myself. I had difficulty finding words to put my thoughts on the topic of politeness. I had an idea of what I was thinking in my mind but experienced great difficulty in trying to get the words I was writing to capture what I was thinking in my mind. (Project report)

These challenges were based on the participants' awareness of the authors' role of dialoguing with readers and audiences, which would be a fundamental goal of both reflective tasks in this study.

Potential of the reflective tasks
The participants valued both the reflection paper and digital storytelling as contributions to their learning and development as future ESOL teachers. They enjoyed sharing their stories about language and culture, and they were motivated and empowered when recognising that their experiences and diversity would be significant resources in completing the reflective tasks. The participants believed that understanding diverse linguistic, cultural, and educational topics based on their own reflections would be a meaningful learning process. In his presentation, Ahmed said:

> I believe that these two experiences [about the reflective project] will equip me with the necessary skills as EFL teacher in regard to the language, culture, and technology because in both experiences I discussed very interesting topics that should be explained in any ESL program, and my experiences clearly showed the evidence. The reflections on my knowledge and the topics were great opportunities to learn and to become a successful teacher. (Presentation)

The participants understood that their awareness of diverse linguistic and cultural topics would help them become culturally sensitive teachers, so their positive perspectives on the reflective project were meaningful. Moreover, since they selected their own topics, described and discussed them in depth, and provided supporting details on their own, their ownership was also remarkable.

ESOL pre-service teachers' learning through the reflective tasks

After completing the reflective tasks, the participants wrote a project report and did a presentation to share their experiences. Most of them stated that they learned more about the linguistic and cultural topics for the tasks and made connections between this learning and their future teaching.

As Ahmed's comment showed, the participants emphasised an awareness and learning of their selected linguistic and cultural concepts. They discussed one of the central course objectives, namely an understanding of the significant reciprocal relationships between language and culture. The participants also discussed diverse topics concerning language and culture and shared their opinions and experiences in class. However, limitations to class time prevented some students from considering these topics in depth and sharing their own knowledge and experiences. The reflective tasks provided this opportunity and enabled the participants to think about their future students. Karen said:

> This [project] allowed me to better understand how much culture and language are associated with each other and how they impact the lives of my students and help them form an identity – new or revised – when they are learning English and experiencing different aspects of American culture. (Project report)

These considerations of their identities, as well as their students, also encouraged the participants to think more about educational goals and needs, and to consider the importance of applying what they learned from the reflective project to their future teaching. Abdullah said:

> I think that synthesising my experiences in both topics – directives and greetings – with the academic knowledge from the book will help me understand the diversity of my [future] students better. I would be able to understand and accept different language uses based on their cultures: how my international students create a request and how they greet other people depending on their cultural backgrounds. (Presentation)

Eventually, the participants' learning enhanced their willingness to integrate more linguistically and culturally diverse materials and topics into their future teaching. Karen said:

> In my future ESL teaching career, these topics I have learned about and discussed today will certainly influence the ways I organise my course syllabi and class lessons. Without a doubt, I will be incorporating more culture into the classroom, but I will also use any new information I learn about my students' cultures as a way to help me become a better teacher … As an ESL teacher, my future classes will consider these topics and use them as a way to help my students – whether kids or adults – build confidence in who they are and help them shape who it is they want to become. (Project report)

Other participants, including Abdullah, Patricia, and Donna, also discussed linguistic and cultural questions that would arise in classes, and were willing to serve as resource persons to resolve the issues.

Discussion and implications

In this study, ESOL pre-service teachers valued and appreciated both the reflection paper and digital storytelling. Completing the tasks enhanced their awareness and learning of diverse linguistic, cultural, and educational concepts and topics (Brewer & Jozefowicz, 2006), and enabled the participants to make connections between their content knowledge, linguistic and cultural experiences, and future teaching. In this section, I will discuss the participants' dialogic hybrid learning through the combined reflective tasks. In addition, I will provide pedagogical implications for the components that teacher educators need to consider when they use digital storytelling in ESOL pre-service teacher education.

Dialogic hybrid learning through combined reflective tasks

The reflective tasks in this study were the reflection paper and digital storytelling, and the participants learned about and acquired a nuanced understanding of questions pertaining to language, culture, and education (Brewer & Jozefowicz, 2006). These tasks facilitated the participants' dialogic hybrid learning, which I define as learning via both traditional and technologically assisted methods with internal and external dialogic interactions. The participants explored and discussed their topics about language and culture, and they integrated these topics in their upcoming teaching contexts, so their learning was more meaningful (Sadik, 2008). For the reflective tasks with mixed modes, the participants used both traditional and technologically assisted methods, so they transferred their knowledge of developing each task (see the cases of Ahmed and Saad). In addition, the different modes and requirements of the two reflective tasks encouraged the participants to consider new or blended ways to strengthen the messages in their stories. For both tasks, the participants' knowledge and experiences, as preceding utterances, were significant resources for their own learning. For example, Rachel discussed language learners' struggles due to linguistic barriers and cultural differences by sharing the moment when she had lunch with her host family. This experience enabled her to consider and discuss the issue more critically. Through these reflective procedures, the participants actively dialogued with their own preceding utterances as their memories to activate their schema (Bakhtin, 1981, 1986; Park, 2012; Park & Kim, 2011, 2016, 2017; Rumelhart, 1980). Therefore, the participants' discussions and arguments could be meaningful and in depth. These dialogues also made their learning dynamic.

Meaningful learning occurred in both traditional and technologically enhanced contexts, so it was hybrid in nature. Both the reflection paper and digital storytelling facilitated the participants' autonomous and

independent learning. This occurred due to their self-selection of the topics, awareness of the significance of the topics, and critical, reflection-based discussions of their own knowledge and experiences. Digital storytelling played a critical role in the new learning contexts. The participants developed their skills to use diverse computer hardware and software applications, such as Windows Movie Maker, iMovie, and Audacity. Even though learning how to use computer technology was not a goal of the course, the participants learned its potential usefulness in their future teaching. Like Ahmed, other participants believed that their knowledge and skills in using technology would facilitate their future teaching.

The reflective project, which included the reflection paper and digital storytelling, also facilitated learning in both traditional and technology-enhanced learning contexts. The participants valued their learning of diverse topics about language and culture through reflections, and the combination of the two tasks with different modes facilitated their hybrid learning. Hybrid learning contexts are important because pre-service teachers can learn through multimodal texts in new learning environments, wherein they will teach their own students. Therefore, it is meaningful to combine both traditional and technologically based tasks to enhance their learning and future teaching.

What teacher educators need to consider when using digital storytelling in ESOL pre-service teacher education

Teacher educators also need to consider their students' autonomous and independent learning to make their learning more significant in hybrid learning contexts. Even though the participants had to follow the basic instruction for digital storytelling, they still had diverse opportunities to select their topics, organise the tasks, and negotiate meanings while completing the digital storytelling. For example, Karen told her story about email etiquette. This was not a major discussion topic in class, but she decided to share her experiences in education based on the initial dialogue with her own preceding utterances. She negotiated meanings to discuss whether or not teachers would need to teach email etiquette to students. As Karen's case showed, digital storytelling empowered the participants to give their active and critical voices to the topics of language, culture, and education, which would be significant for their future careers teaching English as a second language (ESL) and English as a foreign language (EFL).

As one of the main assignments in the class, digital storytelling effectively showed students' deep understanding of the content and critical voices (Farmer, 2004; Shelby-Caffey et al., 2014). Since the course objectives were to enhance students' awareness of the relationship between language and culture and to reinforce their understanding of theories and pedagogy, digital storytelling successfully demonstrated and provided sufficient information to assess students' learning and achievements. Students' active dialogues with their preceding utterances facilitated the meaningful understanding and learning of the course content, and their voices, as in the case of Karen and Fang, were both personal and professional. The students did not stay at this level of learning but further applied their knowledge to future teaching as their current or future utterances. Therefore, the experiences of completing digital storytelling lend students a sense of proficiency and competence with technologically supported learning environments, and motivates them to use instructional technology in their future classes (Burmark, 2004; Farmer, 2004; Kobayashi, 2012; Robin, 2008).

However, since students encounter challenges with the technology when constructing digital stories, teachers will need to remain flexible in their technological requirements. Unless the primary goal of the course is to teach technology, teachers need to provide students with the option of using diverse software applications. For example, most participants in this study used Windows Movie Maker or Apple's iMovie software to create videos by putting images, narrations, background music, videos, and texts together. Other participants used Microsoft PowerPoint to tell their stories or filmed their own stories with audio and video recorders or mobile devices. In addition to these applications and devices, websites that provide assistance in creating digital storytelling include Capzles (http://www.capzles.com/), Slidestory (http://www.slidestory.com/) and Storybird (http://storybird.com/). These enable users to develop digital storytelling by using their own or provided multimedia resources. They will help users create attractive and complete digital storytelling more easily. For example, Storybird enables users to make visual stories by providing diverse images (unless users

wish to use their own) and templates that users can easily select and organise. Therefore, if students have clear plans and ideas about their digital stories, the sites will reduce their concerns about technology. By using these websites, students can pay closer attention to their stories and learning instead of negotiating unfamiliar software applications, as in Banaszewski's (2002) study.

Conclusions

This study showed ESOL pre-service teachers' similar and different performances and experiences when completing a reflection paper and digital storytelling. The remarkable factors were associated with their organisations, supporting details, formal/informal expressions, challenges, and potential of the reflective tasks. When working on the reflective project, the ESOL pre-service teachers organised both tasks similarly, but their selection of supporting details and formality of the expressions in each task were different. Although they addressed several challenges, they still valued both reflective tasks as contributions to their development as future ESOL teachers. Completing both reflective tasks significantly influenced their dialogic hybrid learning of language, culture, education, and technology – learning that encouraged them to consider their future students and teaching.

This study is significant because it provides the evidence for, and implications of, the effectiveness of combined reflective tasks – the reflective paper and digital storytelling – in hybrid learning of ESOL teacher education. However, as the number of participants was limited, I could not conduct more diverse analyses based on the participants' gender and linguistic and cultural backgrounds. To expand the understanding of reflective tasks in education, further research on a larger number of participants from diverse cultural backgrounds might include the following topics: the role of personal, social, and cultural differences in shaping students' performance; and influences on the perception of using digital storytelling in diverse educational contexts. In addition, more systematic and thoughtful integration of these combined reflective tasks into education will be helpful for pre-service teachers' meaningful learning and professional growth.

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