Using digital tools and storytelling

by Varangkana Pusiripinyo

Using Digital Tools and Storytelling to Improve Thai EFL Pre-service Teachers' Pronunciation Ability

VARANGKANA PUSIRIPINYO

English Program, Faculty of Education

Phetchabun Rajabhat University, Thailand

SIWAPORN SAITO

English Program, Faculty of Education

Phetchabun Rajabhat University, Thailand

Email siwaporn.sai@pcru.ac.th

ABSTRACT

This research aimed to study the impacts of using digital tools and storytelling on Thai EFL pre-service teachers' pronunciation ability. The research employed the mixed methods design to gather qualitative and quantitative data. To investigate the effectiveness of the instruction, integrating digital tools and storytelling on pronunciation, a pre-experimental, using a one-group pre-test post-test design, was conducted with 34 pre-service teachers at a public university in the southern north of Thailand for eight weeks. The research instruments comprised 1) lesson plans, using digital tools and storytelling to enhance pronunciation ability, 2) pre-and post-test on testing pronunciation ability, 3) learning logs, and 4) attitude questionnaire. The statistical measurements included means, standard deviation, percentage, and dependent t-test. In terms of qualitative analysis, the coding and thematic analysis methods were adopted to analyze the data. The findings revealed that the post-test average scores of the Thai EFL pre-service teachers' pronunciation ability were higher than the pre-test (p< 0.05). The average attitude of the pre-service teachers on the instruction, using digital tools and storytelling to enhance pronunciation ability, indicated that they agreed that the instruction had a positive impact at the very high level of 4.52. For the qualitative findings, the impacts found were 1) phonological awareness, 2) confidence increases, 3) positive learning motivation, 4) pronunciation improvement, 5) pronunciation teaching application, and 6) self-directed learning.

Keywords: digital tools; storytelling; pronunciation ability; feedback

INTRODUCTION

Given that clear and accurate pronunciation can facilitate better interpretation of messages, it is crucial for English language learners to analyze spoken language effectively, thereby enhancing comprehension (Hewing, 2004). Pronunciation is a fundamental aspect of communication, and numerous researchers have dedicated decades to investigating methods to improve students' pronunciation. The primary aim has been to enhance learners' listening skills and oral communication, underpinned by the belief that pronunciation instruction can significantly improve students' pronunciation efficacy. Findings from previous studies indicate a positive correlation between pronunciation ability and pronunciation instruction (Arrieta, 2017). However, research focusing on enhancing the pronunciation abilities of EFL pre-service teachers still needs to be expanded despite the expectation that these individuals should serve as exemplary role models for learners. Many studies have concentrated on improving general students' pronunciation, neglecting the specific needs of EFL pre-service teachers, whose pronunciation should be of a high standard to guide their students effectively. According to Aksakalli & Yağiz (2020), there is a notable paucity of research addressing the pronunciation abilities and instruction of EFL pre-service teachers.

In the English language teaching context, EFL pre-service teachers are expected to produce utterances encompassing both segmental and supra-segmental elements with precision, fluency, and clarity. Cabrera (2016) emphasized the necessity for Thai teachers to guide students in producing suprasegmental elements, highlighting the importance of training EFL pre-service teachers to analyze pronunciation problems and produce accurate utterances. Hamilton (2011) further asserted that effective communication requires attention to individual sounds and suprasegmental elements such as stress and intonation. In Thailand, where English is perceived as a foreign language, the accurate pronunciation of English words is often challenging, impacting effective communication. This challenge extends to EFL pre-service teachers, who require additional training to refine their pronunciation skills and, consequently, guide their students more effectively. Pusiripinyo (2020) observed that student teachers needed help with accurate pronunciation during their teaching practicum despite completing a phonology course. This observation aligns with findings by Kotcharat & Limsiriruengrai (2014), which revealed that

English major students needed help pronouncing English speech correctly even after completing a Phonetics course and studying phonological systems, primarily due to insufficient practice.

To elucidate the obstacles that Thai EFL pre-service teachers face, pronunciation difficulties are often attributable to interlanguage systems (Selinker, 1972). Language transfer, a key factor in the formation of interlanguage, frequently results in negative transfer due to the differences between the first language and the second language. Consequently, Thai EFL pre-service teachers are prone to producing errors in English speech. Dee-in (2006) identified common pronunciation errors among Thai speakers in the consonant sounds, namely /g/, /tʃ/, /dʒ/, /v/, /z/, /ʒ/, /θ/, /ð/, and /ʃ/, as well as in the vowel sounds; /i/, /ɪ/, /e/, /ə/, /u/, /ʊ/, /aʊ/, /eɪ/, and /eə/. Additionally, Thai speakers often omit final sounds, a tendency stemming from the Thai language's omission of final sounds. Regarding suprasegmental features, Thai speakers struggle with stress and intonation patterns, as these differ significantly from English due to the tonal nature of the Thai language. Another factor contributing to pronunciation difficulties is the overgeneralization of target language rules, where learners extend or mix specific target language rules (Richards, 1971).

From the challenges that hinder EFL pre-service teachers from mastering English pronunciation, numerous studies have explored the application of technology to enhance pronunciation skills (Yoshida, 2018). Some research has concentrated on using Computer-Assisted Language Learning (CALL) to enable learners to observe and emulate native speakers' speech. Additionally, the digital era has introduced a variety of applications designed for teaching pronunciation, providing learners with essential input to understand concepts and practice their output. However, the efficacy of digital tools is significantly enhanced by constructive feedback from teachers, peers, and self-assessment. Pokrivčáková (2015) recommended optimal use of digital materials involves engaging learners in communicative exercises, such as interactive activities, simulated conversations, or peer-to-peer role-playing. These perspectives suggest that integrating digital tools in pronunciation teaching should be closely linked to interactive activities to provide an input-output stage. Therefore, this research will focus on selecting digital tools that facilitate interaction among students and teachers, ensuring that corrective feedback is effectively utilized for pronunciation development.

Regarding the usefulness of digital tools, this research study utilized three applications to provide pre-service teachers with language input, output, and feedback. The first digital tool

selected was Padlet, which facilitates interaction by allowing learners to share their opinions through various functions such as a ranking system, word cloud mode, and open-ended answers. This application enables learners to analyze problematic sounds and share their findings with classmates. The second digital tool chosen was Seesaw. This application is advantageous for practicing language output as it allows learners to create video recordings and upload them immediately via mobile phones. Additionally, learners can provide comments and feedback on their peers' pronunciation, fostering collaborative learning. Lastly, YouTube was incorporated as a rich source of authentic input for pre-service teachers. It offers access to stories native speakers tell, thereby enhancing learners' exposure to natural language use. These three digital tools collectively support pronunciation teaching by offering comprehensive language input, platforms for sharing storytelling, and an interactive tool for analyzing segmental and suprasegmental aspects.

Digital tools are powerful resources for language teachers. However, storytelling is an efficient method for developing oral skills, which involves interactive communication between the teller and the audience. A storyteller aims to convey meaning engagingly and interact with listeners, making storytelling an authentic task that provides learners with a natural context for speaking (Lucarevschi, 2016). Hence, storytelling can be an effective method that can be used with digital tools to enhance pronunciation ability. This study employed storytelling techniques to offer Thai EFL pre-service teachers opportunities to produce language within a meaningful context. According to Aruntharee (2001), storytelling techniques can be categorized as follows: 1) telling stories using only the teller's voice, 2) telling stories with actions, 3) telling stories with pictures, 4) telling and drawing, 5) telling and singing, and 6) telling stories using props. These techniques demonstrate that storytelling is not merely about memorizing and narrating a story; instead, it challenges EFL pre-service teachers to make their storytelling engaging. Furthermore, storytelling is an effective tool for language teaching, allowing pre-service teachers to practice storytelling in the classroom. Integrating digital tools with storytelling, known as digital storytelling, can enhance learners' four skills, namely listening, speaking, reading, and writing, as well as other competencies (Thang et al., 2014).

The core objective of this research is to enhance pre-service teachers' pronunciation abilities by integrating digital tools and storytelling in lesson designs. As future English teachers, pre-service teachers must be proficient in analyzing segmental and suprasegmental elements of

pronunciation and providing constructive feedback to themselves and their peers. To investigate the effects of digital tools and storytelling on the pronunciation abilities of Thai EFL pre-service teachers, the following research questions have been formulated:

1. Is there a significant difference between the pronunciation test scores before and after using digital tools and storytelling?
2. In what ways do digital tools and storytelling influence the pronunciation abilities of Thai EFL pre-service teachers?
3. What is the attitude of Thai EFL pre-service teachers toward the instruction using digital tools and storytelling?

METHODOLOGY

RESEARCH DESIGN

This study employed a mixed-methods approach, incorporating qualitative and quantitative data collection methods. To explore the participants' progress in pronunciation ability, a quasi-experimental, one-group pre-test and post-test design was utilized.

PARTICIPANTS

The research involved 34 Thai EFL pre-service teachers preparing for their teaching practicum in their teacher education program's fourth and final year. Purposive sampling was used to select the EFL pre-service teachers who were to complete the last year of the study program by working in schools for their teaching practicum credits. All participants had completed the phonetics course in their second year. Among the participants, 30 were female, and 4 were male.

RESEARCH INSTRUMENTS

This investigation utilized a set of five research instruments, namely: 1) lesson plans, 2) a pronunciation test, 3) learning logs, 4) fieldnotes, and 5) a questionnaire assessing pre-service teachers' attitudes towards instructional methodologies. In order to elucidate the methodology for

the application and data collection employing these research instruments, the researcher devised the instruments as outlined below.

<center>LESSON PLANS</center>

Eight lesson plans were crafted corresponding to the selection of eight stories. The design of these lesson plans was informed by integrating pedagogical tasks commonly associated with pronunciation teaching (Yoshida, 2018) into the sequential steps outlined in the utilization of storytelling within English Language Teaching (ELT) classrooms (Wright, 1995), as well as incorporating storytelling techniques (Arunthari, 1999). The iterative process of lesson plan design commenced with the identification of digital tools, followed by the selection of appropriate stories, the delineation of lesson plan components, and culminated in a thorough examination of their validity and reliability.

Commencing with selecting digital tools, the process was guided by the imperative of choosing tools that would offer students substantial input and facilitate their engagement in pronunciation analysis, thereby enabling adequate feedback provision. A systematic approach to tool selection was adopted, employing the criteria Yoshida (2018) outlined in alignment with learning objectives, quality, accuracy, practicality, and cost considerations. Consequently, YouTube was identified as an apt choice for furnishing authentic input from native speakers. This platform allows learners unrestricted access to digital narratives narrated by native speakers, facilitating individualized viewing experiences conducive to enhanced comprehension. Additionally, Padlet was embraced to foster discussion and interaction among learners. Notably, Padlet's functionality enables educators to seamlessly share video links, facilitating collaborative engagement and allowing learners to articulate and exchange viewpoints at their own pace. Furthermore, Seesaw emerged as a preferred platform for facilitating the presentation and dissemination of learners' storytelling performances. Leveraging its user-friendly interface, Seesaw enables learners to effortlessly record and upload video content via mobile devices, facilitating peer review and feedback exchange. These three digital tools were selected for their accessibility and cost-effectiveness, ensuring easy integration into instructional contexts without imposing financial burdens.

Preceding the development of lesson plans integrating digital tools and storytelling, a pivotal preliminary step involves delineating the content area. Eight stories were chosen based on their capacity to address specific phonetic challenges, including problematic sounds, stress patterns, and intonation, observed within the pronunciation abilities of EFL pre-service teachers. Each selected story underwent meticulous scrutiny to ascertain its suitability for facilitating immersive language input and fostering expressive output, thereby enabling targeted improvements in pronunciation proficiency. The chosen narratives, enumerated as follows, serve as the foundation for subsequent instructional endeavors: 1) Do You Speak English, Moon?, 2) There Was an Old Woman who Swallowed a Fly, 3) Grandfather Bear is Hungry, 4) Jack and the Robber, 5) Squeaky Door, 6) Green Eggs and Ham, 7) It's a Squash and a Squeeze, and 8) The Little Engine that Could.

TABLE 1. An example of story and pronunciation analysis

Title	Pronunciation Focus				
	Initial sounds	Final sounds	Vowel sounds	stress	intonation
It's a Squash and a Squeeze	/θ/, /ð/, /pl/, /r/, /l/, /fl/, /kr/, /sq/, /gr/	/z/, /f/, /s/, /n/, /k/, /g/, /t/, final/-ed/, /tʃ/, /ʃ/, /ŋ/	/i/, /ɪ/, /ʌ/, /ə/, /e/, /ɛ/, /ʊ/, /ɑʊ/	Two-word stress; lady, tickle, implore, heaven, grumbled Three-word stress; gigantic, enormous, happiness	Rising/falling intonation Ex; Take in my hen? What a curious plan!

After identifying content areas, the learning objectives were determined according to the prominent pronunciation aspects, starting from sounds, stress, and intonation. Moreover, the teaching steps were designed by integrating teaching pronunciation with teaching storytelling. Before designing the content specification, the framework of the teaching model was created, as it was to be used as a guideline.

Drawing upon the insights of Yoshida (2018), the pedagogical tasks essential for effective pronunciation instruction were delineated as follows: 1) provision of a pronunciation model, 2) facilitation of student pronunciation practice recording, 3) collection and assessment of students' recorded practice, and 4) provision of independent pronunciation practice opportunities. These

tasks were strategically integrated into the instructional sequence, harmonizing with the narrative elements and digital tools employed. In crafting the instructional sequence, the researcher adopted the instructional phases outlined by Wright (1995), which encompass 1) pre-storytelling, 2) while-storytelling, and 3) post-storytelling stages. During the pre-storytelling phase, teachers leverage strategies to activate students' prior knowledge and pre-teach relevant vocabulary through various means, such as visual aids and movement activities. Subsequently, the while-storytelling phase entails dynamic storytelling delivery, leveraging vocal inflections, gestures, and active student participation. Finally, the post-storytelling phase encourages students' engagement through story retelling, fostering creative expression and consolidation of linguistic skills.

The teaching activities were structured into three distinct phases to synthesize the teaching steps mentioned previously with the instruction in this study. The pre-storytelling stage's initial phase commenced with a comprehensive discussion encompassing the story's title, characters, settings, character actions, and predictive elements. Subsequently, a meticulous phonological analysis of the story's phonetic elements, including phonetic sounds, word stress patterns, and intonation aspects, was facilitated utilizing online dictionaries and the interactive digital platform Padlet. Following this preparatory phase, the storytelling was presented, prompting EFL pre-service teachers to analyze storytelling techniques and narrative delivery critically. Transitioning to the while-telling stage, participants were exposed to digital storytelling video clips sourced from YouTube, whereupon they conducted a detailed examination of phonetic nuances, stress patterns, and intonation features within the story. Subsequent group activities involved collaborative storytelling practice, complemented by reciprocal peer feedback mechanisms. Throughout this phase, the teacher provided instructional guidance, facilitated skill refinement, and offered corrective feedback to EFL pre-service teachers. In the post-storytelling phase, participants delivered their storytelling performances by using the Seesaw application to record and share storytelling videos with peers. This stage encouraged participants to engage in self-assessment and peer evaluation, fostering a supportive learning environment conducive to skill enhancement. Furthermore, participants were prompted to articulate reflective insights via the Seesaw platform upon completing each instructional session, promoting metacognitive engagement and continuous improvement.

Developing content specifications and lesson plans was conducted due to the steps of teaching identified previously. Subsequently, the content specification and lesson plans underwent

a rigorous validation process involving three experts' assessments utilizing the item objective congruence index (IOC). Lesson plans attaining an IOC value falling within the range of 0.67 to 1.00 were deemed suitable for inclusion in the pilot study, reflecting a high degree of alignment with instructional objectives and content specifications. Following the validation phase, the qualified lesson plans underwent trial implementation with a cohort of six EFL pre-service teachers excluded from the study sample. Feedback from this pilot phase facilitated iterative adjustments to the lesson plans, ensuring refinement in line with instructional efficacy and participant needs. Specifically, modifications were made to the duration of lessons, with additional emphasis placed on extending the time allocated for video creation and sharing activities. Additionally, it was observed that providing corrective feedback during the practice phase of the while-telling stage was imperative. This adjustment was necessary as students exhibited difficulty in self-correction during the while-storytelling phase. Consequently, corrective feedback was integrated into the while-telling stage to address this deficiency effectively. The refined lessons were subsequently implemented with the actual study sample after these revisions.
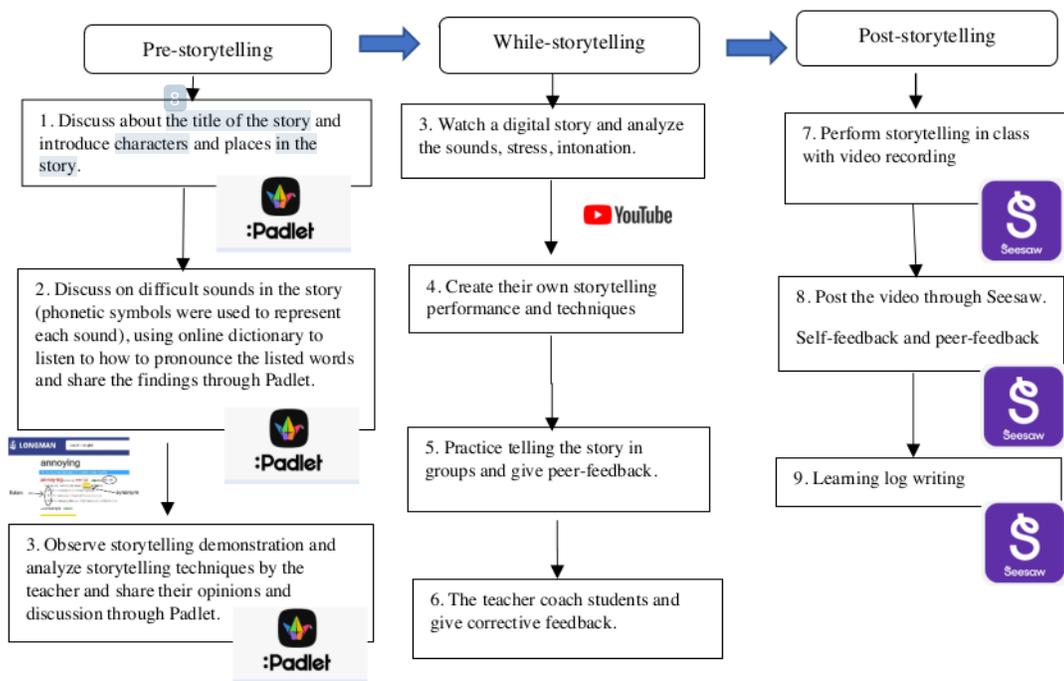
.

FIGURE 1. The model of the instruction, integrating digital tools and storytelling to enhance the pre-service teachers' pronunciation.

The pronunciation test was developed by integrating elements from the pronunciation test devised by Gerhiser & Wrenn (2007), coupled with principles delineated in the design of pronunciation tests as elucidated by Brown & Abeywickrama (2019). Comprising six distinct sections, the test evaluated various aspects of pronunciation proficiency, including 1) initial consonant sounds, 2) final consonant sounds, 3) vowel sounds, 4) stress patterns in two-syllable words, 5) stress patterns in three-syllable words, and 6) intonation patterns. Each section carried equal weightage, with a maximum score of 10 points allocated per segment.

TABLE 2. part one test example; testing ability to produce sounds of initial consonants

Part 1: Testing initial consonant. Circle the sound that the test taker pronounces incorrectly.	Initial Sounds tested	Wrong sounds pronounced
Once, a **bl**acksmith had the most beautiful daughter. She was such a good daughter to him. He was so **pr**oud. He **w**ished to wed her with the best male in the uni**v**erse. "My daughter must have the best male in the universe as her husband!" said the blacksmith. One day, as he was pounding iron, he saw the **r**eflection of the sun. **Th**en, he looked up in the sky. Seeing the sun, he said, "the sun has sent the **br**ightest **l**ight to earth. So, I **th**ink he is the best male in the Universe. He will be my son in law. I will not **ch**ange my mind for **s**ure"	/bl/, /pr/, /r/, /l/, /br/, /v/, /w/, /tʃ/, /ʃ/, /θ/, / ð/	Score: ..../10

After designing the test specification, the pronunciation test was administered to three experts to validate the item objective congruence index and evaluate whether the test items were relevant to the test objectives. The analysis result displayed an IOC value between 0.68-1.00, indicating an excellent value of IOC. The scoring method was conducted by listening to the test taker's pronunciation, with one point for each correctly pronounced sound marked in each part of the test. Test administration required participants to read aloud excerpts from stories individually, with an allotted 8–10-minute timeframe. Voice recordings of the test sessions were employed to facilitate subsequent verification of scoring accuracy, thus bolstering the reliability of test scoring.

Furthermore, the three experts evaluated the test specifications to ascertain the appropriateness of the test construct. Subsequently, the test was piloted with a cohort of EFL preservice teachers excluded from the study participants. The pronunciation test scores from the pilot study were used to identify the discrimination index and reliability. As a result, the discrimination index of the pronunciation test items was between 0.2 and 0.8. The Kuder-Richardson Formula 20 (KR-20) was employed to achieve test reliability, and the analyzed data revealed a value of 0.932.

The questionnaire assessed the attitudes of Thai EFL pre-service teachers who underwent a systematic design process. Drawing upon established principles, the researcher opted for a 5-point Likert scale format, encompassing responses ranging from "strongly agree" to "strongly disagree." Additionally, items from a prior investigation conducted by Sitti (2022) were adapted, categorically addressing three overarching domains: content, learning activities, and usefulness. Following the adaptation process, the questionnaire comprised 12 items, each subject to evaluation utilizing the index of item objective congruence (IOC). Subsequently, the instrument was deployed to ascertain participants' attitudes toward instructional methodologies integrating digital tools and storytelling to facilitate pronunciation enhancement. The questionnaire underwent a pilot phase to gauge its reliability, culminating in calculating Cronbach's alpha coefficient, which yielded a value of 0.831, indicative of internal solid consistency among the questionnaire items. After the pilot study, the finalized questionnaire was administered to participants after completing the 8-week instructional intervention. This facilitated the collection of comprehensive feedback regarding participants' perceptions and attitudes toward the instructional approach.

LEARNING LOG

Utilizing learning logs, EFL pre-service teachers documented their pronunciation challenges, progress, reflections, and insights subsequent to the completion of each instructional session. To mitigate potential translation ambiguities and language barriers, participants were encouraged to articulate their reflections and progress in the Thai language, facilitating clearer expression and comprehension of their learning experiences across the duration of the 8-week intervention.

DATA ANALYSIS

Qualitative data from the learning logs were analyzed using coding and thematic analysis techniques. The coding schemes were conducted to explore the themes that emerged from the learning logs. The framework used for the coding process started with familiarizing the texts, generating initial codes, searching for themes, reviewing themes, defining and renaming themes, and discussing the emerging themes to answer the research questions (Braun & Clarke, 2006). The

coding schemes were conducted in the pilot study before being applied in the main study. Two inter-coders participated to ensure the coding method's reliability and consistency. One of the coders was the researcher, and the other was a lecturer from an English program holding a doctoral degree in English language teaching.

The pre-test and post-test pronunciation scores were analyzed using a dependent samples t-test for quantitative data. Additionally, the pre-service teachers' attitudes were analyzed using means and standard deviations.

RESULTS

RESEARCH QUESTION 1: DIFFERENCE BETWEEN THE PRONUNCIATION TEST SCORES BEFORE AND AFTER USING DIGITAL TOOLS AND STORYTELLING

The first question of this research considered whether digital tools and storytelling can improve pre-service teachers' pronunciation test scores. To answer this first research question, the pre-test and post-test scores were used to compare the pre-service teachers' pronunciation before and after the instruction that integrated digital tools and storytelling were implemented.

TABLE 3. The pre-test and post-test scores of the pre-service teachers (N=34).

Testing	Mean	SD	t	Sig.
Pre-test	28.00	5.10	15.93	0.0000
Post-test	40.50	6.30		

From Table 3, the average of pre-test score was 28.00 and the post-test score was 40.50. Therefore, there was a statistically significant difference between the pre-test and post-test score (p. < 0.05). It can be concluded that using digital tools and storytelling can effectively enhance Thai EFL pre-service teachers' pronunciation ability.

RESEARCH QUESTION 2: THE IMPACTS OF DIGITAL AND STORYTELLING IN THE EFL PRE-SERVICE TEACHERS' PRONUNCIATION ABILITY

The data collected from learning logs after being coded, the six emerging themes were found as 1) phonological awareness, 2) confidence increases, 3) positive learning motivation, 4) pronunciation improvement, 5) pronunciation teaching application, and 6) self-directed learning.

PHONOLOGICAL AWARENESS

Analysis of the learning logs revealed that EFL pre-service teachers demonstrated an improved ability to differentiate incorrectly pronounced sounds following practice and corrective feedback. Several participants noted their efforts to control final sounds, recognizing that incorrect pronunciation could alter the meaning of words. Additionally, they learned that some sounds were pronounced differently from the rules they had previously learned. Some participants reflected on the necessity of consulting dictionaries to ensure accurate pronunciation. The learning logs also indicated that pre-service teachers identified and attempted to address their problematic sounds, particularly those aspects of pronunciation absent in Thai. This improvement was further evidenced by their ability to subconsciously correct their peers' mispronunciations and self-correct during storytelling activities. Participants frequently repeated mispronounced words upon recognizing their errors, illustrating enhanced phonemic awareness and self-monitoring capabilities as demonstrated as follow:

> "I need to control my final sounds because I tend to drop them. I know that this could change
> the meaning of those words. When I watch my video clips, I realized that I have a problem
> with /r/ and /l/ since we don't have them in our language"

CONFIDENCE INCREASES

The learning logs of the Thai EFL pre-service teachers revealed a notable increase in their confidence levels. Initially, participants reported nervousness and shyness about performing storytelling activities, primarily due to their lack of experience and limited opportunities to speak English daily. They also expressed concerns about their pronunciation, reflecting on their previous phonetics course, which needed more practical application. However, viewing their storytelling performances on the Seesaw platform allowed them to observe their progress. This reflective

practice significantly boosted their confidence, reassuring them of their ability to conduct storytelling and guide students effectively during their teaching practicum. As mentioned by the Thai EFL pre-service teachers' reflection:

> "After practicing storytelling and record my performance, I became more confident little by little. It seems I have a chance to apply what I learned in the real context."

POSITIVE LEARNING MOTIVATION

The Thai EFL pre-service teachers' learning logs indicated a positive emotional response to the lessons. They reported enjoying the sessions and finding the storytelling activities engaging and entertaining. The digital tools employed in the instruction were particularly well-received, as these platforms facilitated the sharing of ideas and the practice of analytical thinking. The participants noted that these tools enhanced their engagement and enjoyment, especially when reading feedback and words of encouragement from their peers, which fostered a sense of enthusiasm for class participation. The participants also wrote in their learning logs that they were eager to learn about upcoming stories and expressed a keen interest in receiving corrective feedback, as they were motivated to improve the quality of their storytelling. Some even suggested creating elaborate videos with realistic settings for making movies. This demonstrated their enthusiasm and active involvement in learning and practicing pronunciation.

> "It was so much fun to get to listen to a story and try to perform it by myself. I also like when the teacher used Padlet dashboard to get us share our opinion after analyzing sounds and stress in each story. I had to think a lot and became active learner."

PRONUNCIATION IMPROVEMENT

The EFL pre-service teachers' learning logs documented notable progress in their pronunciation skills. By identifying their problematic pronunciation aspects, such as specific sounds, stress patterns, and intonation, the participants actively worked to address and improve these areas. They reported an increase in speech fluency over time. Several pre-service teachers compared their initial video recordings to their most recent ones, expressing pride and satisfaction with their progress.

"I think my pronunciation is getting better. I can overcome my weakness on pronouncing /r/. I know that we don't have this sound in our language. However, I could manage to get rid of this problem after getting feedback and keeping practicing. I could finally coach my friend to be able to solve the same problem".

PRONUNCIATION TEACHING ABILITY

The Thai EFL pre-service teachers reflected on the efficacy of using digital tools, such as digital storytelling from YouTube, to provide students with practical language input. They expressed intentions to incorporate these tools in their teaching practicum. Additionally, they found storytelling activities beneficial for practicing speaking skills and enhancing pronunciation. They emphasized students' need to understand the sound system and its production to improve their pronunciation. Furthermore, the pre-service teachers indicated their plans to apply digital tools and storytelling techniques in their future classrooms. Interestingly, they felt more confident in their ability to coach students and provide constructive feedback to help them address problematic sounds. In addition, they proposed using digital platforms to allow students to access language input at their own pace, practice pronunciation through storytelling, and share their performances digitally. The Thai EFL pre-service teachers reflected on the efficacy of using digital tools, such as digital storytelling from YouTube, to provide students with practical language input. They expressed intentions to incorporate these tools in their teaching practicum. Additionally, they found storytelling activities beneficial for practicing speaking skills and enhancing pronunciation. They emphasized students' need to understand the sound system and its production to improve their pronunciation. Furthermore, the pre-service teachers indicated their plans to apply digital tools and storytelling techniques in their future classrooms. Interestingly, they felt more confident in their ability to coach students and provide constructive feedback to help them address problematic sounds. In addition, they proposed using digital platforms to allow students to access language input at their own pace, practice pronunciation through storytelling, and share their performances digitally.

"Using digital storytelling is useful to teach English. I've learned a lot from watching storytelling videos and analyzed the sounds, stress, and intonation in many stories. I think I will use digital storytelling from YouTube to get students to watch and practice telling stories. And using Seesaw is very convenient to get students perform their storytelling. They will have their time to practice and listen to their speech just like what I did".

The EFL pre-service teachers reflected on their commitment to practicing pronunciation outside class hours. They reported engaging in self-directed practice sessions and exploring additional storytelling content on platforms like YouTube beyond the prescribed curriculum. Some participants identified supplementary applications offering pronunciation improvement games, recognizing the importance of serving as effective language models for their future students. Moreover, several pre-service teachers demonstrated a spirit of collaboration by sharing instructional videos on pronunciation improvement via the Seesaw platform, thereby facilitating peer learning. Many expressed their intent to continue practicing pronunciation independently, even after completing the eight lessons. They acknowledged the value of sustained practice in honing their pronunciation skills, having gained insights into effective pronunciation strategies during class sessions. This collective commitment to ongoing practice underscores their recognition of the correlation between diligent practice and eventual proficiency attainment.

> "Using digital tools is a good way to learn English. I could listen to English whenever I have free
> time. Also, I could share a learning tool with my classmates. I could even see my storytelling
> performance and try to fix it before sharing with my classmates."

RESEARCH QUESTION 3: THE EFL PRE-SERVICE TEACHERS' ATTITUDE TOWARD USING DIGITAL TOOLS AND STORYTELLING TO ENHANCE PRONUNCIATION ABILITY

TABLE 4. The attitude level of the Thai EFL pre-service teachers on the impacts of using digital tools and storytelling to enhance pronunciation ability

No.	Item	SD.	Mean	Level
Content				
1	The content of the lessons, integrating digital tools and storytelling, is suitable for practicing pronunciation.	0.66	4.59	Very high
2	The instruction, integrating digital tools and storytelling, contains appropriate pronunciation aspects for practicing.	0.61	4.59	Very high
3	The amount of content and time was suitable for learning.	0.55	4.62	Very high

No.	Item	SD.	Mean	Level
4	The content of the lessons, integrating digital tools and storytelling encourages to improve pronunciation ability	0.58	4.29	high
Activities conducted				
5	The activities encourage learning interaction.	0.74	4.38	high
6	The activities are practical and engage learners.	0.57	4.74	Very high
7	The activities support positive learning environment.	0.70	4.38	High
8	The activities are appropriate for applying the use of digital tools and storytelling to enhance pronunciation ability	0.49	4.65	Very high
Usefulness				
9	The instruction, integrating digital tools and storytelling, can improve my pronunciation ability.	0.50	4.59	Very high
10	The instruction, integrating digital tools and storytelling, can help me recognize my pronunciation errors and fix them.	0.60	4.65	Very high
11	The instruction, integrating digital tools and storytelling, provides more opportunity to listen to English.	0.73	4.35	High
12	The instruction, integrating digital tools and storytelling, provides more opportunity to speak English.	0.61	4.41	High
	Average	0.32	4.52	Very high

In Table 4, the Thai EFL pre-service teacher positively agreed that the instruction, integrating digital tools and storytelling, had an impact on enhancing pronunciation ability at the mean level of 4.52. The most positive item they rated was the activities were practical and engaged learners, with the mean at a level of 4.74.

DISCUSSION

To address the first research question, the analysis of results indicates a notable enhancement in the pronunciation proficiency of the pre-service teachers after the instructional intervention. A marked increase in post-test scores compared to pre-test scores was observed, suggesting a significant improvement in pronunciation ability. This study's findings are relevant to Lucarevschi (2018), who similarly observed the pronunciation skills of EFL learners while implementing storytelling. Lucarevschi's research demonstrated higher post-test pronunciation scores than pre-test scores, thus corroborating the outcomes of the present study. Additionally, this outcome

underscores the efficacy of digital tools and storytelling methodologies, which allow learners ample opportunities to engage with language input and output. This finding is consistent with prior research, notably the work of Blake (2013), which highlights the capacity of digital tools to facilitate personalized and effective avenues for improving pronunciation among L2 learners.

To answer the second research question, the extent of the impacts of digital tools and storytelling on the Thai EFL pre-service teachers' pronunciation ability, the findings revealed 6 features which were 1) phonological awareness, 2) confidence increases, 3) positive learning motivation, 4) pronunciation improvement, 5) pronunciation teaching application, and 6) self-directed learning. The six features found were discussed as follow.

In discussing phonological awareness, the EFL pre-service teachers reported an enhanced ability to distinguish between sounds and identify their problematic areas. This aligns with the noticing hypothesis proposed by Schmidt (1994), which posits that second language acquisition (SLA) learners can effectively monitor language when they consciously attend to input. In this study, participants engaged in activities involving the analysis of sounds, stress patterns, and intonation while also receiving and providing feedback to peers through integrating digital tools and storytelling methodologies. Celce-Murcia, Brinton, & Goodwin (2010) further support this approach, asserting that learners can benefit from recording and listening to their pronunciation. Such practices facilitate the development of self-correction abilities, enabling learners to refine their pronunciation skills autonomously.

From the perspective of the Thai EFL pre-service teachers, their confidence levels experienced an augmentation through engagement in activities allowing for personal practice and self-observation preceding actual storytelling performances. This enhanced confidence may stem from the opportunity to refine their skills and receive feedback on their performances before sharing their videos. This observation aligns with the findings of Lucarevschi (2016), who suggest that learners benefit from multiple opportunities to practice pronunciation through narrative retelling within authentic contexts, thereby bolstering their confidence in oral expression.

Utilizing digital tools and storytelling techniques, the EFL pre-service teachers exhibited heightened enthusiasm towards the instructional sessions, evincing positive attitudes towards the activities. This heightened enthusiasm served as a motivational impetus, prompting increased engagement in learning and practice activities, facilitated by the interactive nature of the digital tools. This finding was supported by Haryadi & Aprianoto (2020), who found that integrating

digital technology tools effectively engendered learner engagement and motivation. Moreover, the Thai EFL pre-service teachers articulated their anticipation of improved pronunciation and expressed enjoyment during the practice stage, attributing this positive experience to the interactive nature of storytelling. This observation resonates with the assertions made by Sharma (2018), suggesting that storytelling activities can enhance motivation and alleviate anxiety in language learning contexts.

Furthermore, storytelling catalyzes English speaking practice within and beyond classroom settings, as posited by Difuza (2021). In sum, digital tools and storytelling methodologies are potent motivators for learning and practicing pronunciation. Digital tools are recognized as catalysts for motivation, fostering learning autonomy, and stimulating creativity, as noted by Hafner & Miller (2015).

The teaching application found in this research revealed the exploration of integrating digital tools and storytelling in pronunciation instruction among Thai EFL pre-service teachers. Participants recognized this instructional approach as a valuable tool for enhancing their students' English skills, particularly highlighting the usefulness of digital tools in providing diverse linguistic input and fostering active participation. Storytelling activities were particularly valued for stimulating language output and enabling repetitive practice, a key factor in improving pronunciation. This study's findings were supported by previous research. For instance, Gilakjani and Sabouri (2016) emphasized the importance of multimedia in pronunciation teaching, highlighting how digital tools can provide authentic listening experiences and immediate feedback, enhancing learners' phonological awareness. Furthermore, the findings suggest integrating digital tools and storytelling can address educators' skepticism regarding pronunciation instruction (Derwing & Munro, 2005). These methods provide precise, structured approaches to teaching pronunciation, which can particularly benefit novice teachers. As Levis (2005) points out, effective pronunciation teaching requires a combination of explicit instruction and meaningful practice, both facilitated by digital tools and storytelling. In the context of Thai EFL pre-service teachers, the study highlights the potential for these teachers to serve as effective role models, demonstrating accurate pronunciation. This aligns with the broader educational goal of preparing pre-service teachers to become proficient English language instructors. According to Burgess and Spencer (2000), teachers' pronunciation significantly influences their students' pronunciation skills,

underscoring the importance of training pre-service teachers in effective pronunciation teaching methods.

Regarding pronunciation improvement, the Thai EFL pre-service teachers reported their progress and improvement since they were more aware of pronunciation aspects through phonological analyzing activity and giving self-feedback, peer feedback, and receiving corrective feedback from the teacher. This helped them to be mindful of how to reduce language transfer and produce correct ones. As proposed by Ferguson (2011), it is necessary for learners' development if they are provided with feedback since it can lead learners to monitor, evaluate, and regulate their learning. Furthermore, storytelling provides rich, comprehensible input and interactive output in a realistic context, activating them to keep practicing inside and outside the classroom. According to Wang & Castro (2010), comprehensible input through listening and reading can help improve speaking fluency.

The learning logs revealed that the EFL pre-service teachers actively engaged in pronunciation practice through storytelling activities both inside and outside the classroom. They explored additional digital tools to enhance their language input and shared these resources with their peers. The teachers wanted to continue improving their English skills even after the lessons concluded. This behavior aligns with the concept of self-directed learning, as defined by Knowles (1975). It involves learners taking the initiative to identify their learning needs, set goals, find resources, and evaluate their progress. By integrating digital tools and storytelling activities, the EFL pre-service teachers extended their learning beyond the formal classroom, utilizing various online resources (Sundqvist & Sylvén, 2016). Moreover, these lessons provided opportunities for learners to recognize, assess, and critically reflect on their learning, thereby fostering the development of self-directed learning skills (Acar et al., 2016).

Regarding the attitudes of EFL pre-service teachers toward using digital tools and storytelling lessons, the findings are a resounding endorsement of their effectiveness. The teachers agreed that the instruction significantly enhanced their pronunciation abilities, and the content and activities provided ample opportunities to engage with the target language. This robust feedback suggests that EFL pre-service teachers perceive the content, activities, and overall utility of digital tools and storytelling as effective in encouraging pronunciation improvement. This finding is consistent with Inayah's (2015) research, which revealed that students have positive attitudes toward storytelling techniques and that these techniques positively impact their speaking abilities.

Notably, the activities in each lesson offered opportunities for analyzing pronunciation aspects, receiving language input through both oral and digital storytelling, practicing, and performing speech, all of which contributed to pronunciation improvement. This aligns with Nugroho and Atmojo (2020), who found that digital devices provide extensive opportunities for language learning both within and beyond the formal classroom setting. Furthermore, integrating digital tools and storytelling helped EFL pre-service teachers recognize and correct their pronunciation errors, thereby reducing first language transfer. This was achieved through proper correction strategies, repetitive practice, and increased language input and output (Qiaolan, 2022).

CONCLUSION AND IMPLICATION

This study aimed to investigate the impact of using digital tools and storytelling to enhance the pronunciation abilities of EFL pre-service teachers. The results indicated a significant improvement in pronunciation ability, evidenced by higher post-test scores than pre-test scores. Analysis of learning logs and fieldnotes revealed that using digital tools and storytelling positively influenced the teachers' development, including phonemic awareness, confidence, motivation to learn, pronunciation ability, and the application of pronunciation teaching strategies. Furthermore, these methods fostered self-directed learning among the participants. The EFL pre-service teachers also expressed positive attitudes toward using digital tools and storytelling to improve pronunciation.

Based on the findings, this study offered insights to improve English language learners' pronunciation and reduce negative language transfer by providing natural input through storytelling. Additionally, incorporating storytelling lessons supported by digital tools can create opportunities for learners to practice pronunciation and engage with the lessons by sharing their storytelling performances via video recordings. This approach facilitates natural learning and practices both inside and outside the classroom. Integrating digital tools and storytelling in instruction provides a clear framework for effective pronunciation teaching for the development of Thai EFL pre-service teachers. The EFL pre-service teachers indicated they could apply the eight lessons learned during their teaching practicum. In the pre-storytelling phase, teachers can introduce characters, settings, and actions in the story, predict events, and analyze sounds, stress,

and intonation using digital tools such as talking dictionaries, Padlet, phonics online games, and other digital applications. During the while-storytelling phase, teachers can utilize digital storytelling from platforms like YouTube and allow students to practice storytelling with teacher feedback. Finally, in the post-storytelling phase, learners can create video clips, share them with classmates, and reflect on their learning progress.

REFERENCES

Acar, C., Kara, I., & Taşkin Ekici, F. (2016). Development of self-directed learning skills scale for pre-service science teachers. *International Journal of Assessment Tools in Education, 2*(2), 3–13. https://doi.org/10.21449/ijate.239562

Arrieta, M. (2017). *Teacher and student perceptions of World Englishes (WE) pronunciations in two US settings* (MSc. Thesis, Portland State University). https://doi.org/10.15760/etd.5309

Aksakalli, A., & Yağiz, O. (2020). The pre-service EFL teachers' development of phonological processing and evaluation of their attitudes toward pronunciation. *Gist Education and Learning Research Journal, 20*, 7-31.

Blake, R. (2013). *Brave new digital classroom: Technology and foreign language learning*. Georgetown University Press.

Braun, V. & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology, 3* (2). pp.77-101. Retrieved from: http://eprints.uwe.ac.uk/11735

Brown, H. D., & Abeywickrama, P. (2019). *Language assessment: Principles and classroom practice* (3rd ed.). Pearson.

Burgess, J., & Spencer, S. (2000). Phonology and Pronunciation in Integrated Language Teaching and Teacher Education. *TESOL Quarterly, 34*(3), 443-467.

Cabrera, R. (2016). English speaking and pronunciation competence in students of Suan Sunantha Rajabhat University. International conference on Management Science, Innovation, and Technology.

Celce-Murcia, M., Brinton, D. M., & Goodwin, J. M. (2010). *Teaching pronunciation: A course book and reference guide* (2nd ed.). Cambridge University Press.

Dee-In, W. (2006). *The development of computer-assisted instruction lessons promoting oral skills for English problem sounds for students of English majoring in international communication, Rajamangala University of Technology Lanna Phitsanulok Campus* (Thesis of Master of Education, Uttaradit Rajabhat University, Uttaradit).

Derwing, T., & Munro, M. (2005). Second language accent and pronunciation teaching: A research-based approach. *TESOL Quarterly, 39*(3), 379-397. https://doi.org/10.2307/3588486

Dilfuza, N. (2021). Importance of storytelling technique in teaching English language. *Journal of Natural Science, 4*(4).

Ferguson, P. (2011). Student perceptions of quality feedback in teacher education. *Assessment & Evaluation in Higher Education, 36*(1), 51-62.

Gerhiser, A., & Wrenn, D. (2007). *Second language pronunciation assessment handout packet*. [Online]. Retrieved July 15, 2023, from http://teachingpronunciation.pbworks.com/f/Pronunciation+assessment+packet+.pdf

Gilakjani, A. P., & Sabouri, N. B. (2016). The significance of pronunciation in English language teaching. *English Language Teaching, 9*(3), 96-107.

Hafner, C., & Miller, L. (2011). Fostering learner autonomy in English for science: A collaborative digital video project in a technological learning environment. *Language, Learning and Technology, 15*, 68-86.

Hamilton, C. (2011). *Communicating for results: A guide for business and the professions*. Wadsworth Cengage Learning.

Haryadi, S., & Aprianoto. (2020). Integrating "English pronunciation" app into pronunciation teaching: How it affects students' participation and learning. *JOLLT Journal of Languages and Language Teaching, 8*(2), 202-212. https://doi.org/10.33394/jollt.v8i2.2551

Inayah, R. (2015). Improving students' speaking skill through storytelling technique. *ELTIN Journal, 3*(1), 25–37. Retrieved from https://ejournal.stkipsiliwangi.ac.id/index.php/eltin/article/view/119/108

Kotcharat, S., & Limsiriruengrai, P. (2014). *The development of English pronunciation by using English phonetics exercise*. [Online]. Retrieved February 15, 2022, from https://dspace.bru.ac.th/xmlui/handle/123456789/1001

Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. Institute of Education Science.

Levis, J. M. (2005). Changing contexts and shifting paradigms in pronunciation teaching. *TESOL Quarterly, 39*(3), 369-377.

Lucarevschi, C. R. (2016). The role of storytelling on language learning: A literature review. *Working Papers of the Linguistics Circle, 26*(1), 24-44.

Nugroho, A., & Mutiaraningrum, I. (2020). EFL teachers' beliefs and practices about digital learning of English. *Elite: Journal of English Education, Literature, and Culture, 5*(2), 304–321. https://doi.org/10.30659/e.5.2.287-303

Pokrivcakova, S. (2014). CALL and teaching pronunciation. In *CALL and foreign language education: e-textbook for foreign language teachers* (pp. 29-37). Nitra: Constantine the Philosopher University. https://doi.org/10.17846/CALL.2014.29-37

Pusiripinyo, V. (2020). The impacts of using storytelling on student teachers' pronunciation, English major. *Silpakorn University Journal, 40*(5), 45-58.

Qiaolan, G. (2022). Interlanguage and its implications to second language teaching and learning. *Pacific International Journal, 5*(4), 08-14. https://doi.org/10.55014/pij.v5i4.223

Richards, J. (1971). A non-contrastive approach to error analysis. *English Language Teaching Journal, 25*(1), 43-45.

Robin, B. R. (2008). Digital storytelling: A powerful technology tool for the 21st century classroom. *Theory into Practice, 47*(3), 220-228.

Schmidt, R. (1994) Deconstructing Consciousness in Search of Useful Definitions for Applied Linguistics. *Consciousness in Second Language Learning*, 11, 237-326.

Selinker, L. (1972). Interlanguage. *International Review of Applied Linguistics in Language Teaching, 10*(3), 209-231.

Sharma, D. R. (2018). Action research on improving students' speaking proficiency in using cooperative storytelling strategy. *Journal of NELTA Surkhet, 5*, 97-105.

Sitti, N. (2022). Development of grade 7 students' English pronunciation skills using applications in conjunction with CIRC technique at an opportunity expansion school in Pathumthani province (Master's thesis).

Sundqvist, P., & Sylvén, L. K. (2016). *Extramural English in teaching and learning*. Springer.

Thang, H. M., Sim, L. Y., Mahmud, N., Lin, L. K., Zabidi, N. A., & Ismail, K. (2014). Enhancing 21st century learning skills via digital storytelling: Voices of Malaysian teachers and undergraduates. *Procedia-Social and Behavioral Sciences, 118*, 489-494.

Wang, Q., & Castro, C. D. (2010). Classroom interaction and language output. *English Language Teaching, 3*(2), 175-186.

Wright, A. (1995). *Storytelling with children*. Oxford University Press.

Yoshisa, M. R. (2016). Choosing technology tools to meet pronunciation teaching and learning goals. *The CATESOL Journal, 30*(1), 195-212.

Using digital tools and storytelling

7	call2017.language.berkeley.edu Internet Source	<1%
8	www.chefile.cmru.ac.th Internet Source	<1%
9	www.eurchembull.com Internet Source	<1%
10	fulltext.rmu.ac.th Internet Source	<1%
11	core.ac.uk Internet Source	<1%
12	litu.tu.ac.th Internet Source	<1%
13	www.mecsj.com Internet Source	<1%
14	bu.edu.eg Internet Source	<1%
15	www.andrewatkins.org Internet Source	<1%
16	www.mdpi.com Internet Source	<1%
17	rrs.mmu.edu.my Internet Source	<1%
18	Ashraf Atta Mohamed S. Salem. "Multimedia Presentations Through Digital Storytelling for	<1%

Sustainable Development of EFL Learners' Argumentative Writing Skills, Self-Directed Learning Skills and Learner Autonomy", Frontiers in Education, 2022
Publication

19	eipublication.com Internet Source	<1%
20	Submitted to Benedictine University Student Paper	<1%
21	Submitted to Queen Mary and Westfield College Student Paper	<1%
22	Submitted to Thammasat University Student Paper	<1%
23	Submitted to University of Canberra Student Paper	<1%
24	publications.waset.org Internet Source	<1%
25	bmcpalliatcare.biomedcentral.com Internet Source	<1%
26	ejournal.unuja.ac.id Internet Source	<1%
27	lra.le.ac.uk Internet Source	<1%
28	mail.journalijcar.org Internet Source	

<1 %

29 www.theindependent.com
    Internet Source   <1 %

30 www.tuj.ac.jp
    Internet Source   <1 %

31 files.eric.ed.gov
    Internet Source   <1 %

32 nanopdf.com
    Internet Source   <1 %

33 research.pcru.ac.th
    Internet Source   <1 %

34 www.homesciencejournal.com
    Internet Source   <1 %

35 www.jurnal.unsyiah.ac.id
    Internet Source   <1 %

36 "Second Handbook of English Language
    Teaching", Springer Science and Business
    Media LLC, 2019   <1 %
    Publication

37 Loren Jones, Sharon L. Smith, Carmen
    Durham. "Teachers as digital composers:
    Designing digital jumpstarts to scaffold for
    emerging bilingual learners", Computers &   <1 %
    Education, 2022
    Publication

38 digitallib.iainkendari.ac.id
    Internet Source   <1%

39 Mitra Zeraatpishe, Akram Faravani, Hamid
    Reza Kargozari, Maryam Azarnoosh. "Issues   <1%
    in Applying SLA Theories toward Reflective
    and Effective Teaching", Brill, 2018
    Publication

40 Serçin Karataş, Volkan Kukul, Seher Özcan.
    "chapter 27 How Powerful Is Digital   <1%
    Storytelling for Teaching?", IGI Global, 2017
    Publication

41 ijllalw.org
    Internet Source   <1%

42 journal.teflin.org
    Internet Source   <1%

43 m.moam.info
    Internet Source   <1%

44 mypolycc.edu.my
    Internet Source   <1%

45 so02.tci-thaijo.org
    Internet Source   <1%

46 www.call2018.org
    Internet Source   <1%

47 www.ijhsr.org
    Internet Source   <1%

48 www.unistrapg.it
Internet Source
<1 %

49 Paladd Sakulthanit, Myo Zin Oo, Soe Sandi Tint, Khemika Yamarat. "Effectiveness of the Health Education Intervention using Facebook and LINE on Intention to Reduce Alcohol Consumption among Entertainment Girls in Bangkok, Thailand: A Randomized Controlled Trial", The Open Public Health Journal, 2024
Publication
<1 %

50 Pascal Hohaus, Jan-Friso Heeren. "The Future of Teacher Education", Brill, 2023
Publication
<1 %

51 Anton, Steven C.. "A Mixed Methods Study on the Impact of Utilizing Mixed Reality Simulations on Pre-Service Teachers' Coping and Anxiety", Western Connecticut State University, 2024
Publication
<1 %

52 Atalan, Esra. "The Use of Quizlet in Teaching Vocabulary to 9th Grade EFL Students", Anadolu University (Turkey), 2023
Publication
<1 %

53 Bazari, Nazeera Ahmed. "Development of an Online Case-Based Problem-Solving Module for Esl Writing Instruction", University of Malaya (Malaysia), 2023
Publication
<1 %

Exclude quotes   On

Exclude bibliography   On

Exclude matches   < 6 words