



## Investigating Vocational High School Instructors' Views on Mobile Learning (M-Learning) in the "Tourism English Conversation" Course

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**Abstract.** This research delved into the perspectives of English teachers in vocational high schools towards mobile learning (m-learning) in the "Tourism English Conversation" course. It involved interviews with eleven teachers from public vocational high schools in Kaohsiung City, Taiwan. These interviews explored various facets of m-learning, such as teachers' knowledge of mobile devices and apps, the widespread use of the Internet and mobile devices, instructional materials, and its impact on students' learning duration and concentration. The study focused on three aspects of mobile learning: its acceptance, teachers' readiness to adopt it, and the challenges they face in shifting from traditional to mobile teaching methods. Findings revealed a positive reception towards m-learning, particularly during the COVID-19 pandemic when traditional classroom teaching was impossible. Nonetheless, the effective implementation of m-learning was influenced by teachers' familiarity with the technology, student motivation, the availability of relevant instructional materials, and the pressures associated with teaching in this new format.

**Keywords.** Vocational High School, Mobile Learning, Tourism English Conversation Course, Instructional Design, Phenomenographic Analysis.

## **1. Introduction**

Kaohsiung City is Taiwan's most important traditional manufacturing and heavy industrial city and port. In addition to its crucial industrial position, it has been vigilantly upgrading into an international metropolitan area with manufacturing, technology, and service in recent years. Moreover, recognizing the importance of English as the primary language of communication, Taiwan's central government announced its vision of becoming a "Bilingual Nation" by 2030. These visions highlight the need for technology and English proficiency in the workforce. This research delves into integrating mobile technology in education, specifically in Kaohsiung City's vocational high schools. It examines the enhancement of learning through technology, the pivotal role of mobile learning during the COVID-19 pandemic, the shift from traditional teaching methods, English instructors' perspectives on mobile learning, and the essential function of VHS in preparing entry-level employees for the hospitality industry. The primary aim is to explore VHS teachers' views on incorporating mobile learning into their "Tourism English Conversation" courses.

Vocational high schools in Taiwan play a critical role in training entry-level employees for the business sector. These schools aim to ensure that graduates are well-prepared to perform entry-level duties seamlessly upon graduation. Given their position as the initial point of contact for international guests, who often create the first and form the most important impressions, emphasizing English communication proficiencies and technological education in these schools is crucial (Peters, 2007).

The rapid advancement of information communication technology and the ubiquity of digital devices have significantly transformed the educational landscape. Technology-based learning offers students flexible and independent learning opportunities in vocational high schools, a necessity underscored during the COVID-19 pandemic when in-person classes were disrupted. This situation necessitated an innovative approach to vocational education, leading to an increased dependence on technology for continuity in learning and teaching (Yang, Yang, & Lu, 2022).

Transitioning to mobile learning presents challenges, particularly in moving away from conventional textbook-based methods (Khaddage, Müller, & Flintoff, 2016). This study specifically examines the attitudes of English instructors in Kaohsiung City's vocational high schools towards mobile learning, particularly in "Tourism English Conversation" courses.

This study aims to investigate vocational high school "Tourism Conversation" course teachers' perspectives on integrating mobile learning into their "Tourism English Conversation" courses. Understanding their views is vital for assessing the effectiveness of mobile learning and its impact on equipping students with the skills necessary for the hospitality industry, a significant component of Kaohsiung City's international interface. In essence, this research aims to shed light on the current state of mobile learning in vocational education and propose potential directions for its future development. However, exploring educators' perspectives on mobile learning involves navigating complexities (Huynh & Torquati, 2018). This research employs a qualitative methodology, encompassing interviews and thematic analysis, to gain insights into how educators adapt to and integrate mobile learning in their teaching, especially in English education for tourism.

## 2. Literature Review

This section provides an in-depth exploration of how technology profoundly impacts the development of English conversation skills, specifically focusing on hospitality education. It is structured into four main areas:

**Professional Language Study and Technology Integration in Hospitality Education:** This part delves into the "Tourism English Conversation" teachers' perspectives and challenges they encountered in cultivating vocational high school students' Tourism English communications skills through integrating technology. **Integrating Technology in Teaching and Learning English: A Focus on Hospitality and Tourism Education:** Here, the discussion shifts to the broader application of technology in teaching and learning English, emphasizing its role in hospitality and tourism education. **Mobile Learning and Mobile-Assisted Language Learning:** This section highlights the growing significance of mobile learning and mobile-assisted language learning approaches, underscoring their relevance in modern language education. **"Phenomena Analysis" as a Qualitative Research Method in a Hospitality Education Setting:** The final part examines the use of "Phenomena Analysis," a qualitative research approach, and its application in hospitality education.

Each of these areas offers a unique perspective on the intersection of technology and language learning in the hospitality sector, reflecting the evolving dynamics of this field.

2.1. *Professional Language Study and Technology Integration in Hospitality Education.* In today's globalized world, the importance of English in international communication has surged, prompting a need for substantial changes in language education in Taiwanese schools. This part of the literature review argues that integrating technology into language learning is pivotal for vocational high school students to enhance their English proficiency and prepare them for the global hospitality industry. The discussion unfolds in four parts: examining the current state of English education in Taiwan, addressing the challenges of traditional teaching methods, highlighting the transformative impact of technology on language learning, and underscoring the significance of digital education in the post-COVID-19 era.

Recognizing the international significance of English, Taiwan has embraced the ambitious "Bilingual 2030" vision, integrating English into its educational curriculum to cultivate students' communication abilities, global perspectives, and mobility. The curriculum focuses on listening and speaking skills for elementary students (grades 3 to 6). It expands to a comprehensive array of English language arts skills, including listening, speaking, reading, and writing for junior and senior high school students (Ministry of Education(MOE), Republic of China Taiwan, 2006).

Traditional English teaching methods in Taiwan, predominantly lecture-based and reliant on standardized testing, often fail to provide students with practical language skills. The emphasis on vocabulary, grammar, and sentence structure in written exams and the absence of conversational English in Taiwan's "TVE Joint College Entrance Examination" for science and technology universities diminishes vocational high school students' motivation for learning conversational English (Zhao, 2022). These students frequently opt for vocational schools due to dissatisfaction with the demanding English curriculum in more academic-focused institutions.

Incorporating technology in education can transform language learning, making it more engaging, varied, and interactive. Digital tools like instructional videos, online platforms, smartphone applications, and newly developed generative artificial intelligence (AI) resources (Hong, 2023) have facilitated continuous and adaptable English language practice. This technological approach is particularly advantageous for vocational high school students. They are 'Digital Natives' who integrate technology seamlessly into their daily lives, including social lives, communications, and gaming. Essentially, they can utilize the device for learning anywhere, anytime. The combination of online

learning and on-the-job training recommended by Hegarty and O'Mahony (2001) proves highly effective for this demographic (Kirschner & De Bruyckere, 2017).

Although challenging, the transition to digital education has been a transformative journey (Navjot, 2023)]. The advent of the COVID-19 pandemic, which rendered conventional classroom teaching impractical, led to significant investments in digital infrastructure. This shift has been crucial for vocational high school students in the hospitality sector, providing them with engaging, pertinent, technology-based language learning opportunities. By merging digital resources with innovative teaching strategies, these schools are strategically positioned to address their students' unique needs, equipping them with the skills necessary for success in the global hospitality industry (Asmin, 2019).

2.2. *Integrating Technology in Teaching and Learning English: A Focus on Hospitality and Tourism Education.* The hospitality and tourism sector has experienced significant growth before the COVID-19 pandemic, primarily driven by technological advancements. This part of the literature briefly examines the impact of digital learning on hospitality and tourism education, focusing on its role in enhancing training effectiveness and professional engagement (Hegarty & O'Mahony, 2001). It explores the global trends in digital learning, the transformation of curriculum design due to the COVID-19 pandemic, the challenges faced by vocational high school students in Taiwan learning conversational English, and the necessity of integrating technology with traditional teaching methods in hospitality and tourism education.

The trend of digital learning has profoundly impacted hospitality and tourism education. The COVID-19 pandemic has expedited the shift towards alternative instructional formats and online learning modalities, leading to significant curriculum design and delivery changes. Information and Communication Technologies (ICTs) have become crucial in training, particularly cultural and sustainable tourism behavior. The evolution of work in tourism, shaped by robotics, artificial intelligence, and information accessibility, underscores the importance of digital delivery skills and accessible learning approaches in education (Hegarty & O'Mahony, 2001).

During the COVID-19 pandemic, the need for flexible and innovative educational methods has become essential. The rapid adoption of online learning and digital tools has transformed how education is delivered in the hospitality and tourism sector. This transformation has facilitated the development of virtual learning communities and changed teaching methodologies, reflecting a response to globalization, digitization, and new insights into teaching and learning practices.

Despite technological advancements, Conversational English learning challenges remain, especially for vocational high school students in Taiwan. Their difficulties include low motivation in practicing English, a preference for Mandarin-centric instruction, inconsistent curriculum, and reliance on rote memorization (Xiao, 2015). These issues hinder the comprehensive development of English communication skills, which are critical for future job requirements in the hospitality industry. Moreover, motivational factors, particularly extrinsic ones like achieving high grades on the TVE Unity Test and career opportunities, significantly influence the academic achievements of Taiwan vocational high school hospitality students (Kim et al., 2007).

Integrating technology and digital learning with traditional teaching methods is essential in hospitality and tourism education to overcome these challenges. Addressing limited classroom hours, curriculum continuity, and aligning content with practical requirements necessitates innovative approaches. Effective technology leverage while ensuring the balanced development of English communication skills is vital for preparing students for the evolving demands of the hospitality and tourism industry (Zhou & Huang, 2020).



2.3. *Mobile Learning and Mobile-Assisted Language Learning.* Mobile learning, particularly in language education, represents a revolutionary shift from traditional teaching methods, enabling learners to interact with educational content more dynamically and flexibly. This review will discuss the impact of Mobile-Assisted Language Learning. We will explore the advantages of mobile learning, including personalized content, flexibility, and instant feedback, while addressing the challenges it presents, such as interface design and user disorientation.

Mobile-assisted language learning is at the forefront of this educational evolution, which leverages mobile technology to enrich language learning experiences (Burston, 2014). This approach has transformed how educational content is delivered, breaking free from the constraints of traditional classroom settings (Agbatogun, 2014). The advantages of mobile learning benefit learners, including its adaptability to learners with different abilities offering personalized and context-sensitive learning experiences. It seamlessly integrates learning into everyday life's fabric, expanding educational opportunities and contributing to a deeper understanding and broader knowledge base (Asmali, 2018).

A significant benefit of mobile learning is the empowerment of learners. It encourages self-directed exploration and active participation, shifting from passive absorption to active engagement in the learning process (Aloqaily et al., 2019). The widespread availability of the Internet and mobile devices has broadened access to diverse learning resources. This access allows learners to participate in remote discussions and obtain materials relevant to their specific locations, ultimately enhancing the overall effectiveness and satisfaction of language learning (Alqahtani, 2015). Despite these advantages, mobile learning faces challenges like interface design, user disorientation, and the need for effective instructional materials, which must be addressed to maximize the benefits of its potential (Benali & Ally, 2020).

Researchers and practitioners have made various suggestions to address the challenges and identified the pivotal role of user interface design in mobile learning applications. For instance, Faudzi et al. (2022) highlight the importance of adhering to established user interface guidelines to prevent learner disengagement and cognitive overload. Additionally, Gholizadeh and Rahimi (Gholizadeh & Rahimi, 2023) emphasize the significance of self-regulatory strategies in academic contexts, particularly in enhancing the efficacy of mobile learning tools like automatic spelling correction software for vocabulary acquisition.

Integrating mobile learning into language education, especially within the hospitality industry, has been transformative. Despite its inherent challenges, the advantages of digital learning resources are substantial. As the industry evolves, it becomes increasingly crucial to incorporate engaging, technology-driven learning tools to equip future generations with essential global communication skills.

2.4. *"Phenomena Analysis" Qualitative Research Method in Hospitality Education Setting.* Phenomena Analysis, a qualitative research method in hospitality education, significantly enhances our understanding of students' learning experiences and instructors' perceptions (Moran & Beitsch, 2017). This review briefly outlines the method's focus on individual perspectives and its foundation in phenomenology and phenomenography. It will then discuss the method's application in data collection and analysis, including the importance of bracketing for objectivity.

Central to Phenomena Analysis is its emphasis on the holistic comprehension of human experiences, shaped by each individual's unique background and knowledge (Barnard, McCosker, & Gerber, 1999; Marton & Booth, 1997). This approach recognizes the subjectivity inherent in personal perspectives on specific events or scenarios.

The methodological underpinning of Phenomena Analysis includes two distinct yet complementary concepts: phenomenology and phenomenography (Svensson, 1997). While phenomenology delves into individuals' lived experiences, capturing the essence of their encounters with phenomena, phenomenography offers a structural framework for understanding how these experiences are perceived (Marton, 1986; Giorgi, 1997). The interaction between these concepts is integral to the methodology.

Phenomena Analysis treats learning as a structured and referential process, significantly influencing group perceptions of learning (Marton & Booth, 1997). Data collection, often through interviews, invites respondents to share their experiences, thoughts, and understanding of the learning process. This exploration helps establish a "concept," denoting the relationship between the experiencer and the phenomena they experienced (Barnard, McCosker, & Gerber, 1999).

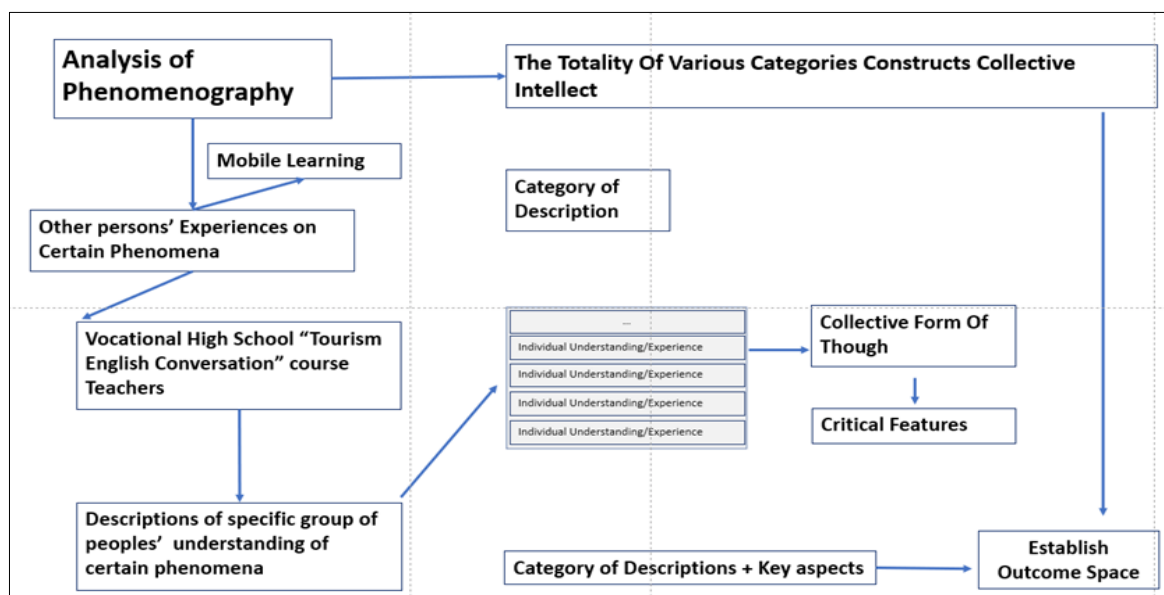


Figure 1. Analysis of Phenomenography (Adopted from (Marton & Booth, 1997))

Figure 1 illustrates the process of Phenomena Analysis, where an investigator studies a group's organization and interprets reality to form "categories of description" (Marton, 1986). These categories, encapsulating collective intelligence, produce a "description result space" outcome that elucidates the phenomena's meaning and structure (Sandberg, 1996). The method's qualitative depth, requiring extensive data from numerous interviews, ensures a diverse range of experiences is considered, as highlighted by Groenewald (Groenewald, 2004). Lastly, Phenomena Analysis emphasizes bracketing in data evaluation (Chan, Fung, & Chien, 2013). Groenewald (2004) suggested 10 to 15 interviews to ensure an unbiased approach and to allow a deeper understanding of how individuals perceive and experience reality (Giorgi, 1997).

### 3. Methodology

**3.1 Subjects.** This study adopts a "Phenomenological Analysis" qualitative research approach to scrutinize the attitudes toward mobile active learning among instructors teaching the "Tourism English Conversation" course in public vocational high schools in Kaohsiung City, Taiwan. After securing approval from the principal and the hospitality program directors, the researcher contacted all the

instructors who teach the "Tourism English Conversation" course in public vocational high schools to invite them to participate in the study. Among all the instructors contacted, eleven (11) teachers agreed and consented to participate in the study and voluntarily provided necessary demographic information and teaching experience. The demographic information is presented in Table 1.

Table 1. The profiles of eleven (11) teachers who responded to the research

Gender	Male		Female	
	N= 3		N= 8	
Age	21-30	31-40	41-50	51-60
	2	6	3	0
Educational Level	Bachelor Degree	Master Degree	Doctoral Degree	
	1	9	1	
Year of teaching Tourism English	0	1-5	6-10	>10
	0	9	1	1

As shown in Table 1, significantly more female teachers (8) compared to male teachers (3), with most aged between 31 and 40. Regarding educational background, most hold Master's degrees (9 out of 11). The table also indicates that most teachers have 1 to 5 years of experience teaching Tourism English Conversation, highlighting their recent engagement in this field. The study was conducted in 2021 during the COVID-19 pandemic when the government prohibited face-to-face interactions. Therefore, the researcher utilized "LINE," a popular social media application in Taiwan, to contact the participants to schedule the individual interviews. The online one-on-one interviews were conducted using the Google Meet online conference application. The researcher activated the Google Meet recording function after acquiring the interviewees' oral consent.

*3.2 The Interview.* The interviews were structured around four key questions to understand and differentiate "action/mobile learning" from conventional methods, assess its usage, and explore enhancement strategies. These questions aimed to elicit comprehensive insights into the educators' perspectives and experiences with this learning paradigm. The questions are:

1. What is "action/mobile learning"?
2. What distinguishes " action/mobile learning" from "conventional (generic) learning"?
3. Why or why not utilize the " action/mobile learning" learning paradigm?
4. How can we enhance " action/mobile learning" and student participation?

Interview questions were designed to give interviewees ample time to express their thoughts without unnecessary immediate summarization by the researcher. The researcher maintained a neutral stance during formal interviews to avoid influencing participants. Avoiding interruption allows the teachers to express their experiences and perceptions freely. This approach aimed to capture the phenomena in their most accurate form. After the interviews, recordings were transcribed verbatim without any textual modifications.

The analysis of the transcripts involved extensive reading and iteration to extract the teachers' views on mobile learning thoroughly. Sentences or phrases that reflected key meanings or perspectives were marked for comparison and contrast. This process identified similarities and differences among the teachers' views, categorizing them into several themes. These categories were then structured into an "outcome space" to represent the teachers' experiences in a hierarchical format.

*3.3. Analyses.* The researcher defined categories and hierarchy in the preliminary analysis phase of respondents' descriptions. In addition, a panel of three experienced researchers conducted a

communicative validity check and an intercoder reliability check, which involved data encoding and classification (Akerlind, 2005). In disagreement, the classification of interview content was revisited and adjusted after cumulative discussions (O'Connor and Joffe, 2020).

The analysis followed the processes demonstrated in Figure 1, which involved comparing key phrases and concepts across interviews to understand the variability in their interpretations. The insights were then categorized into conceptual groups, forming a "description result space" representing the teachers' understanding of the action learning hierarchy. Lastly, the panel performs a communicative validity check and peer-evaluator reliability test on the transcripts. This panel ensured proper encoding, categorization, and "hierarchy structure." If there were any inconsistencies, the panel reexamined the transcriptions and made revisions as necessary to maintain consistency.

#### 4. Results

*4.1. Description result space.* This study uses phenomenography to explore English teachers' attitudes toward mobile learning (m-learning) in vocational high schools. It focuses on integrating m-learning in Tourism English courses.

Teachers' insights show that students' prior academic skills affect their m-learning pace. Students with basic English proficiency learn slower but are not discouraged from using mobile devices. Growing up with smartphones makes them receptive to m-learning.

However, familiarity with specific English learning applications (APPs) impacts learning efficiency. Students skilled in common APPs may still struggle with new APP. Mobile learning offers an active, practice-oriented approach, contrasting traditional passive learning. By leveraging mobile familiarity, m-learning can be effective.

After analyzing and iterating the transcriptions of the interviews, the researcher divided the perceptions into four key categories: "access to the Internet and mobile devices," "familiarity with mobile devices and software," "duration of teaching and students' attention-focus span," and "availability of instructional materials." These categories help create the "description result space." Teachers are mainly concerned about the "availability of instructional materials" among the four categories in this space. The frequencies of each perception category are shown in Table 2.

**Table 2. Frequency of "key perception Category" mentioned by Tourism English Teacher's**

Category				
Teacher	Access to the Internet and mobile devices	Familiarity with mobile devices and software	Duration of teaching and students' attention-focus span	Availability of instructional materials
T1	8	3	2	9
T2	4	5	5	2
T3	3	5	7	8
T4	9	7	6	11
T5	2	5	4	14
T6	7	4	13	15
T7	4	3	4	8

T8	4	6	7	3
T9	4	5	3	7
T10	3	4	3	14
T11	5	8	2	11
<b>Total</b>	<b>51</b>	<b>55</b>	<b>56</b>	<b>95</b>

After finalizing the "description result space," the research panel conducted a communicative validity check and a peer-evaluator reliability test on the transcripts. This panel confirmed the accuracy of the encoding, categorization, and "hierarchy structure." Furthermore, they iterate the interview transcriptions with the frequency distribution table. This process further identified three critical aspects of m-learning: A) the degree of teachers' acceptance, B) teachers' willingness to use it, and C) the teaching pressure they experience.

*4.2. Phonomyography Matrix of Mobil Learning.* The relationship between the categories in this study highlights different degrees of participation in mobile learning for teachers and students, varying from low to high. Teachers provided more in-depth insights regarding their experiences, knowledge, and perspectives on mobile learning. The weight ranged from the "access to the internet and mobile devices" to the "availability of instructional materials." Based on these insights, the research panel developed a four-by-three (4x3) phenomenography matrix (Table 3), which combines the four hierarchy structure categories with three critical aspects: "teacher acceptance," "willingness to use," and "teaching pressure." This matrix effectively maps out the collective experiences of teachers in mobile learning, underlining the varied levels of engagement among educators and learners in this field."

**Table 3. Phonomyography Matrix of Mobil Learning**

Category				
Critical Aspects	Low	←————→		High
		<b>1. Access to the Internet and mobile devices</b> (Frequency=51)	<b>2. Familiarity with mobile devices and software</b> (Frequency=55)	<b>3. Duration of studying time and attention spans</b> (Frequency=56)
<b>A. Teachers' Acceptance</b>	Teacher and students' familiarity with the equipment	Teacher and students' familiarity with the equipment	Students learning motivation	Students learning motivation
<b>B. Teachers are willing to adopt</b>	Teachers Instructional Design	Time spent	Time spent	Instructional Design
<b>C. Teachers' teaching pressure</b>	NA	NA	Learning Effectiveness	Learning Effectiveness

The phonomyography matrix delineates teachers' collective experiences regarding mobile learning within the four categories of the "hierarchy structure," encapsulating three primary aspects. The hierarchy among these categories and aspects demonstrates varying degrees of engagement in m-learning, from low to high, from teachers and students. As shown in the matrix, teachers' concerns from the time spent to "familiarize the devices and software," the "availability of instructional materials," and "instructional design" that can entice students' "learning motivation" and eventually lead to "learning effectiveness" are essential to them. We will discuss each category and key aspects that affect the effectiveness of m-learning.

*4.2.1. Category I-- Access to the Internet and mobile devices.* The advancement of the Internet and mobile devices has significantly influenced mobile learning (m-learning) in education, a shift that became particularly evident during the COVID-19 pandemic. This category discusses the initial limitations of m-learning adoption, the innovative approaches teachers employed to overcome technology barriers, the varied policies on mobile device usage in schools, and the concerted efforts by educational authorities to enhance digital infrastructure during the pandemic.

Before the pandemic, the adoption of m-learning in vocational high schools faced significant challenges, primarily due to the limited availability of mobile devices and reliable wireless networks. This infrastructural limitation hindered the effective implementation of m-learning pedagogy in teaching and learning on campus (Wu et al., 2012).

However, some teachers found creative solutions to these technological limitations. By utilizing campus-wide Wi-Fi and encouraging students to use their mobile phones, teachers could tap into the potential of m-learning. Despite initial technological constraints, this approach allowed students to practice and benefit from the evolving technology-based learning (Wu et al., 2012).

*T2: Our school does not provide tablets. In the classroom, we first collect students' mobile phones into a box at the front. However, if mobile learning is part of the lesson, the collected phones can be temporarily returned to the students. After the mobile learning session is over, the phones are collected again. Since almost all students have mobile phones, I think it is not a problem that the school does not provide tablets. Our school does not offer Wi-Fi access to students, but nowadays, about 90% of the students have unlimited data plans on their mobile phones, so internet access is generally not an issue.*

Nevertheless, adopting m-learning encountered additional hurdles in the form of diverse school policies on mobile phone usage and limited network authentication for students. This school policy was particularly challenging for students without personal devices or those without access to unlimited data plans from mobile companies. In response, some teachers encouraged students with unlimited high-speed data plans to share their network access with classmates, promoting collaborative learning and ensuring more equitable access to digital resources (Khaddage et al., 2016).



*T4: The school has purchased tablets for lending, so there is no need to worry about students using their phones to play games or chat. The school also provides Wi-Fi, which is easy to connect to and offers sufficient speed.*

*T7: The school has applied for Wi-Fi, but many students have unlimited data plans to share their Internet connection with classmates. We have a language lab, but going back and forth to it can be pretty time-consuming. It is more efficient for everyone to take out their mobile phones and connect to the Internet that way.*

During the pandemic, there was a concerted effort by the Taiwan Ministry of Education (MOE), local governments, and schools to bridge the digital divide. They quickly provide high-speed Internet access on campuses and make it available to faculty and students. Some local governments and schools distribute tablet computers to students who have difficulty accessing equipment. These actions significantly enhanced the digital learning environment, addressing the equipment gap and facilitating a smoother transition to m-learning during this unprecedented period.

*4.2.2 Category 2-- Familiarity with Mobile Devices and Applications of teachers and students.* Mobile learning (m-learning) has emerged as a transformative element in the educational landscape, offering a dynamic alternative to traditional pedagogical methods. This shift marks a significant departure from conventional learning approaches, which often cater to passive learning styles.

*T1: I believe that students should have a certain level of foundational skills, at least understanding the textbook's content. The effectiveness of mobile learning as a supplementary tool is better when this foundation is in place.*

M-learning's interactive and iterative nature addresses the needs of learners with diverse proficiency levels, potentially bridging educational gaps that traditional methods have struggled to close (Wu et al., 2012). This introductory context sets the stage for exploring the varied perspectives of Tourism English Conversation instructors on m-learning, particularly regarding its role in addressing students' unique needs and learning environments.

*T4: When dealing with students who have lower abilities, I use more game-like apps to boost their confidence. I have noticed that students initially at a lower academic level also tend to have weaker smartphone skills for searching or getting accustomed to platforms. They might need more detailed explanations about internet search operations, as they are probably more used to playing games on their phones rather than using them for learning.*

The current study sheds light on the diverse views of Tourism English Conversation instructors regarding m-learning, reflecting their distinct pedagogical contexts and the specific needs of their students. Instructor T1 emphasized the importance of foundational knowledge, advocating for m-learning as an effective adjunct to traditional textbook-based instruction (Sung, Chang, & Liu, 2016). In contrast, Instructor T4 leveraged gamified applications to build confidence among less proficient learners, navigating common challenges in digital learning environments. This approach aligns with existing research highlighting gamification's role in enhancing learning outcomes (Hong et al., 2021; Huang, 2005).

Interestingly, Instructor T5 argued that a student's initial English proficiency does not necessarily determine the effectiveness of m-learning. This perspective aligns with research suggesting that the success of m-learning depends on how educators design and implement their teaching strategies rather than on the students' pre-existing skills.

*T5: mobile phones are under control in my school, and students usually connect to the Internet using their own networks due to the school's network requiring authentication. The lack of surplus tablets in the school means some students without mobile phones cannot engage in mobile learning activities.*

On the other hand, Instructor T11 noted that while lower academic abilities do not always correspond to poor digital skills, they can influence students' engagement with m-learning.

*T11: I do not think the quality of the students significantly affects their use of mobile learning. A student might have poor academic skills, but that does not necessarily mean they cannot use mobile devices effectively.*

The consensus among these instructors indicates that learners' familiarity with mobile devices and applications is crucial for maximizing the benefits of m-learning. Digital-native learners, accustomed to a world filled with smart devices, generally show a high receptivity to m-learning. However, even these tech-savvy learners may face challenges when using unfamiliar software or platforms.

These insights underscore the need for a balanced approach to m-learning that recognizes its potential to enhance traditional teaching methods and increase student engagement. The study's outcomes suggest that an inclusive educational approach is vital to align m-learning resources with students' technological capabilities (Sung et al., 2016).

*4.2.3 Category 3-- Duration of student studying time and attention focus spans.* Mobile learning (m-learning) is rapidly becoming integral to traditional teaching methods. However, integrating it into the classroom is challenging, especially when maintaining student engagement and managing attention spans. This section delves into the importance of these factors in the effective use of m-learning.

The duration of student engagement and attention spans is crucial in traditional and m-learning teaching. Finding the right balance between m-learning and maintaining student attention requires careful thought and planning. Teachers widely acknowledge the significant role of attention spans in learning with mobile devices (Kirschner & De Bruyckere, 2017).



*T1: I use mobile devices for mobile learning in the last five minutes of class to minimize issues with classroom management. If the entire class is spent watching videos, the effectiveness is poor because students tend to find it boring.*

While mobile device access in the classroom can provide access to vast resources, it can also introduce distractions. When applied effectively, m-learning can significantly enhance student engagement and focus. On the other hand, its inappropriate use can lead to classroom disruptions and a decline in student interest. A practical approach is to allow mobile devices towards the end of class sessions. This strategy helps minimize negative impacts while focusing on the main content and fostering an interactive learning environment. The success of m-learning thus depends more on its quality than quantity, preventing the boredom that can come from overuse.

*T2: Sometimes, students get distracted and play with their phones even when they are supposed to use their mobile devices for learning. However, since I set a time limit, they prioritize completing the discussion within the allotted time.*

*I believe mobile learning sessions should not be too long, ideally just 10 to 15 minutes. If it continues for longer, students start to lose focus and think about doing other things.*

Zhou and Huang (2020) highlight the importance of goal-oriented teaching, stressing the need for clear objectives and strict time limits in m-learning tasks. Setting these boundaries helps students focus on completing tasks, thus enhancing engagement and reducing distractions. However, m-learning sessions must adhere to predetermined time frames. Optimal duration, typically between ten to fifteen minutes, is essential to maintain focus and avoid negatively impacting learning outcomes.

M-learning is a valuable addition to traditional teaching methods. Nevertheless, its successful integration hinges on aligning with students' attention spans and educational goals. Overusing m-learning can be counterproductive, underlining its role as a supplementary tool in education. It should enhance student interest and focus without detracting from the primary educational objectives (Park, 2020).

In summary, while m-learning offers transformative potential for teaching methods, its effectiveness depends on strategic implementation, an understanding of diverse student attention spans, and an emphasis on maximizing student engagement.

*4.2.4 Category 4-- Availability of instructional materials.* Integrating mobile learning (m-learning) into teaching practices presents potential benefits and challenges, particularly for teachers of Tourism English Conversation. The most prominent concern teachers mentioned is about "the availability of instructional materials" (Frequency=95). This section examines the hurdles and advantages of adopting m-learning, focusing on the need for teaching contents and specific skill development among teachers, creating collaborative learning communities, the impact of student engagement on teacher motivation, and the overall benefits of m-learning for self-directed learning.

Integrating m-learning into teaching methods poses distinct challenges, especially for Tourism English Conversation teachers. It requires them to acquire new skills, including

technological proficiency and the ability to deliver engaging learning content to students.

*T4: I make an effort to enhance my skills in this area. For instance, I started using Google Classroom when it was launched. I like to try integrating new resources first;*

Gaining a comprehensive understanding of digital devices can be intimidating for some teachers who have been trained traditionally. Nonetheless, some schools tried to address these challenges and facilitate a smoother adaptation to the m-learning transition, such as conducting technology workshops and initiating and encouraging collaborative course preparations for a shared sense of responsibility.

*T4: ...if I find them compelling, I share them with my colleagues. This also allows us to use the same teaching materials and share insights, reducing some of the pressure of lesson planning.*

Language teachers often face stress when integrating m-learning, mainly due to the need to find appropriate resources and adapt to digital technology. Establishing learning communities where teachers teaching similar subjects can share lesson preparation responsibilities enhances time management and supports the adoption of m-learning. Platforms like Google Classroom provide a space for collaborative learning, helping reduce individual teachers' workload (Lease & Hill, 2023).

*T8: Co-preparing lessons can save much time in preparing materials. With mobile learning, even if I cannot cover all the material in class, I can use recorded videos and online resources to enable students to learn independently. This way, they will not miss out on learning if they are absent due to illness or other reasons.*

While initial hesitance is common, positive student feedback underscores the advantages of m-learning.

*T4: Initially, I was concerned that using mobile learning might affect the pace of the course or the outcomes, but so far, the feedback from students has been quite positive.*

However, the significant time investment required for effective lesson planning remains a substantial challenge, particularly for Tourism English Conversation teachers. This difficulty is compounded when students undervalue the course, often because "Tourism English Conversation" is not included in the Taiwan Technology and Vocational Education (TVE) National Entrance Exam of the Hospitality Cluster. Consequently, dedicating extensive time to a course with limited direct relevance to students' entrance exams can dampen teachers' enthusiasm for implementing m-learning.

Collaborative preparation and adaptability of m-learning can alleviate these challenges. A supportive teaching environment that encourages collective problem-solving and the exploration of new educational technologies can foster a culture of continuous learning. This approach benefits students and teachers, creating a dynamic and responsive educational setting (Zhang et al., 2021).

Despite its unique challenges, m-learning offers considerable benefits, including promoting self-directed learning (Song et al., 2022). By participating in shared lesson planning, embracing new technologies, and nurturing a supportive community, educators can effectively integrate m-learning into their teaching strategies. This balanced approach allows for successfully incorporating m-learning, enhancing both the teaching and learning experiences in Tourism English Conversation classes.

#### 4.3 Critical Aspects

Further analysis of the initial results revealed three key aspects that illustrate the relationship between the four categories of experiences related to mobile learning. These aspects vary in how they connect to the interviewed teachers' understanding and perspectives on action/mobile learning. Notably, "acquisition of instructional resources" was where the interviewed teachers provided the most detailed descriptions of their experiences.

##### 4.3.1 Critical Aspect A-- Teachers' acceptance of mobile learning.

Teacher acceptance of mobile learning (m-learning) is critical in successfully integrating into the educational landscape. This aspect explores one of the vital determinants influencing teachers' acceptance of m-learning, including their familiarity with relevant technologies, the ease of accessing and using teaching resources, student enthusiasm for m-learning, and teachers' anxiety about adopting new technologies. It also considers the dynamic interplay of these factors in shaping the effectiveness of m-learning implementation, particularly in the context of recent changes in hospitality education due to COVID-19 (Shia, Cai, & Wolfec, 2022).

Firstly, teachers' acceptance of m-learning is closely linked to their understanding of the relevant technologies. The widespread availability of the Internet and mobile devices has played a crucial role in reducing the impact of technological unfamiliarity. Teachers with adequate knowledge and familiarity with m-learning devices and software are likelier to embrace this educational approach. Interviews with teachers reveal increased acceptance when they do not need to spend significant time getting accustomed to these new tools.

*T2: As far as I am concerned, I accept the use of action learning because if I am the only one giving lectures in class, I would find it quite dull. It would be nice if the class atmosphere could be more lively and happy.*

Secondly, the ability of teachers to efficiently acquire and implement teaching resources is a vital factor in their acceptance of m-learning. The discourse on technology acceptance in education suggests that the accessibility of resources significantly influences teachers' willingness to adopt new technologies. When teaching materials are readily available and easily integrated into m-learning platforms, teachers are more likely to utilize these technologies in their instruction.

Moreover, student enthusiasm for m-learning is pivotal in fostering acceptance among teachers. The teacher-student dynamic is crucial to successful m-learning implementation (Agbatogun, 2014). However, some differing views exist. For instance, a teacher (T3) argues that m-learning alone does not necessarily improve language learning unless it increases student motivation.

*T3: There is nothing wrong with mobile learning. It is convenient, but teachers' mobile learning may not improve students' language learning. We will only do it unless mobile learning can improve students' motivation.*

*T10: We often use mobile learning in the first and second years of high school. In the third year, instructors will evaluate whether students are suitable for this learning method because they need to take helping students prepare for applying for universities and the TVE Entrance*



*Examination into account.*

Lastly, anxiety about adopting new m-learning tools is a significant hurdle. Many teachers experience apprehension when learning to use unfamiliar applications, highlighting the necessity for comprehensive training in these areas. Overcoming this anxiety is essential for teachers to confidently adopt and use m-learning methodologies.

*T10: I think teachers are afraid of not knowing how to start because most teachers are very unfamiliar with social software or new apps, and the proportion of students who want to use them is not that high.*

Various factors, including technological familiarity, resource accessibility, student enthusiasm, and comfort with new technologies, influence teacher acceptance of m-learning. Understanding these aspects is crucial for developing strategies to integrate m-learning effectively into educational settings. Such strategies are fundamental in light of the transformative impact of events like the COVID-19 pandemic on sectors like hospitality education (Shia et al., 2022). Enhanced teacher acceptance of m-learning could lead to more innovative and engaging learning experiences, aligning with the evolving demands of contemporary education.

*4.3.2 Critical Aspect B-- Teachers' Willingness to Use Mobile Smart Devices.*

This critical aspect influences teachers' acceptance and willingness to use mobile learning (m-learning) in their pedagogical practices. It explores the relationship between teachers' and students' participation in m-learning with their experiences and familiarity with mobile technologies. Key aspects include the ease of adapting to these technologies, the acquisition of teaching resources, student engagement, and the practical challenges teachers face in integrating m-learning into their teaching designs.

The level of teachers' acceptance of mobile learning is closely related to their knowledge and familiarity with mobile learning devices and software. When teachers are well-versed in these technologies, and if acquiring the necessary hardware and software is not overly burdensome, they are more likely to quickly adapt to using these tools in their teaching. The widespread availability of the Internet and mobile devices has reduced the challenge of adopting m-learning technologies, positively influencing teachers' acceptance and willingness to use them in their educational practices.

A clear understanding and easy access to teaching resources significantly increase teachers' acceptance of m-learning. Teachers who readily obtain and use digital resources for their classes are more likely to integrate m-learning methods into their pedagogy. This aspect is crucial because it directly impacts the efficiency and effectiveness of their teaching, thereby influencing their overall acceptance of m-learning.

Teachers' acceptance of m-learning is also affected by their students' willingness to use this method. High levels of student enthusiasm and participation in m-learning can lead to increased teacher acceptance, resulting in higher levels of participation in mobile learning for both teachers and students. This dynamic underscores the importance of student involvement in successfully implementing m-learning.

*T3: There is nothing wrong with mobile learning. It is convenient; however, teachers' use of mobile learning in teaching may not improve students' language learning efficacy. We will only do it unless mobile learning can improve students' motivation and practice with it.*

However, challenges exist in incorporating m-learning into teaching designs. Teachers often face the dilemma of balancing the time spent preparing for classes and collecting resources with their other



responsibilities, such as teaching other courses and handling various administrative tasks. If the preparation for m-learning is too time-consuming and not perceived as cost-effective, teachers may be hesitant to embrace it fully.

In addition to the factors mentioned above, the prevalence of the Internet and mobile devices influences the flexibility, diversity, and engagement level of course content design regarding mobile devices and apps. Many teachers have variable teaching schedules and cannot guarantee consistent course delivery, leading them to prefer using readily available resources from publishers over designing courses tailored explicitly for m-learning.

*T3: Based on my experience, I teach Tourism English Conversation only once yearly; it makes no sense for me to spend too much time searching for information regarding this course. I might spend more time preparing for the technology integration unless I can be sure that other teachers will not replace my class and will not change all the time; then, I will be more interested in using action learning.*

While the widespread availability of Internet and mobile devices has facilitated the adoption of m-learning, factors such as ease of adaptation, access to resources, student engagement, and practical teaching constraints significantly influence teachers' acceptance and willingness to use m-learning. Understanding and addressing these factors is crucial for effectively integrating m-learning into educational settings and enhancing the learning experience for teachers and students.

**4.3.3 Critical Aspect C-- Teachers' Teaching Pressure.** According to teachers' responses, their school responsibilities extend beyond teaching to tasks like recruiting, administration, and classroom management (Ramanathan, Williams, & Huan, 2016). Given this extensive workload, many teachers are reluctant to develop mobile learning curricula. Their hesitation is fueled by varying teaching assignments each semester, leading them to prefer using resources from publishers or existing materials for ease and convenience.

*T11: I do not use mobile learning because students still have exam progress.*

*T4: Our school actively supports action learning. I like to use action learning myself. However, we must teach many courses besides English Conversation. We need to take those into account. After all, students focus more on preparing to apply to universities and prepare for the TVE Entrance Examination.*

*T10: I think some students in their senior year, especially when preparing for the TVE Unified Exam of Chinese and English, a small number of students will use action learning to review because the teacher shared some websites or resources for them in the first and second years of high school. I have an impression, but I may not be able to explain the content in depth. But when students reach the third year of high school and need to take exams, they will review through action learning and review their original impressions.*

Tourism English Conversation teachers adopting m-learning face many challenges, including integrating mobile technology into pedagogy. Ensuring that unfamiliar devices or



applications do not slow learning and waste time is crucial. Educators must ensure students can use these tools efficiently and address any barriers.

Teacher familiarity with mobile devices affects student participation as they become essential. The "duration and intensity of study" also affect learning efficiency. So, teachers must balance learning new material and using m-learning tools efficiently. Teachers must ensure students focus, revise with m-learning, and maximize learning efficiency. Several teachers shared their mobile learning experiences. T4 noted their school's support for m-learning and traditional academics. T10 said m-learning was mainly in the first two years of high school during the pandemic. Exam schedules limited T11's m-learning use. However, m-learning has emerged, and students prefer mobile learning to prepare for the National Entrance Exam.

Technology affects curriculum design in two ways. It increases course content diversity and flexibility, creating a more interactive and engaging learning environment and affecting student satisfaction, motivation, performance, and connection (Jha et al., 2022). However, the variability in teaching assignments makes educators wary of adopting a mobile learning-based curriculum. Teachers' testimonials show this: "In my experience, I only teach hospitality and tourism English for one year at a time, so I do not want to spend time searching for many materials" (T3). "I believe that enhancing teachers' capabilities requires a significant amount of time to accumulate...all I need to do is to rely on pre-existing systems developed by others..." (T11). Despite its benefits, m-learning requires careful management. Teachers and institutions should ensure it supplements academic focus, supports exam preparation, and improves learning efficiency.

According to teacher responses, their duties in school include administrative and classroom management besides teaching (Ramanathan et al., 2016). With such a heavy workload, they are reluctant to create a mobile learning-centric curriculum due to fluctuating teaching assignments and prefer to use publisher resources or pre-existing materials.

In conclusion, m-learning may improve teaching and learning. Educators' willingness and readiness to adopt this pedagogical shift depends on assignment stability and technological literacy. These concerns should be addressed in future educational policy and support system changes to maximize mobile learning. This adoption could give teachers more consistent teaching assignments and comprehensive m-learning training (Garzón, Lampropoulos, & Burgos, 2023).

## **5. Conclusion**

This study centered on the perspectives of eleven English teachers from Kaohsiung City's public vocational high schools in the hospitality sector. It investigated their perspectives on mobile learning (m-learning), their acceptance, the challenges involved, and how students responded. The findings show that, while these teachers are generally open to m-learning, they have varying concerns, owing to differences in teaching approaches and the effort required to gather resources.

Teachers observed that students generally embrace m-learning because it is relevant to their daily lives. However, extensive use of m-learning in class can sometimes lead to a lack of interest. M-learning can be adopted by creating a positive classroom environment and increasing students' sense of accomplishment.

According to the findings, teachers recognize the value of m-learning and are eager to put it to use. Understanding the capacity of teachers to use mobile devices in language instruction is critical to successfully integrating m-learning into teaching. However, apparent barriers include

limitations in their skills and expertise and their willingness to accept new ways of doing things.

Despite the availability of training workshops, teachers cited time constraints and a lack of foundational knowledge as barriers to fully grasping and applying m-learning techniques. Additional barriers include the time and effort required to create m-learning content, incorporate interactive elements, and assess learning effectiveness.

Another difficulty is inconsistency in subject teaching. Teachers are frequently required to handle courses in which they are unfamiliar on short notice, which reduces their desire to invest in specific courses. This lack of certainty significantly impacts their willingness to use mobile learning.

The study identifies several barriers to implementing m-learning in Kaohsiung City technical high schools, including the need for teachers to become more familiar with technology, the time required to develop resources, student attitudes, fairness in grading, and the diversity of subjects taught. These difficulties are especially noticeable in courses like "Tourism English Conversation."

Based on these findings, it is suggested that government agencies and vocational high school administrations provide critical assistance. The strategies include improving teacher training, developing appropriate resources, and creating stable, supportive teaching and learning environments. Such measures are required for teachers to develop and apply m-learning-based teaching methodologies and practices effectively.

## **6. Limitations**

This research provides valuable information on mobile learning (m-learning) applications in language education within active vocational high schools. However, it is crucial to recognize the limitations arising from the small number of participants involved. The insights gained might not fully represent the range of challenges that teachers face in different settings. Consequently, using these results as a foundation for conducting broader surveys would benefit future studies. These extensive surveys could offer a more comprehensive understanding of the situation, improving m-learning methodologies and offering additional support to teachers and students in their teaching and learning experiences.

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