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TRANSFORMING EMI CLASSROOM DYNAMICS WITH VOICETHREAD: A PARTICIPATORY ACTION RESEARCH APPROACH

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Abstract

The purpose of this participatory action research study was to collaboratively explore the role of VoiceThread in enhancing the dynamics of classrooms that use English as a Medium of Instruction (EMI). Ten participants from a Human Resource Management course in a Taiwanese-UK dual degree program contributed to a nuanced understanding of the impact of VoiceThread on students' engagement and oral communication. Data collected from reflective journals, focus group discussions, and classroom observations were subjected to a thematic analysis and revealed insights into the contributions of VoiceThread to students' participation in interactive learning. While this tool showed promise in facilitating more engaging learning environments, technical challenges that need to be resolved were also identified in the study. It is underscored in the conclusion that VoiceThread has the potential to enrich EMI educational experiences, contingent upon addressing its technical limitations and optimizing instructional strategies.

Keywords: VoiceThread, participatory action research, English as a Medium of Instruction (EMI), students' engagement, interactive learning.

Introduction

The integration of digital pedagogical tools in higher education marks the significant evolution of teaching methodologies that cater to the digital affinities and requirement of flexible learning of students from the millennial and Generation Z demographics (Shatto & Erwin, 2017; Skinner, Sarpong, & White, 2018). Among these innovative methodologies, VoiceThread emerges as a notable platform that enhances asynchronous communication and responds to the preferences of modern students that shape the contemporary learning landscape (Brunvand & Byrd, 2011; Ching & Hsu, 2013; Delmas, 2017). As a multifaceted multimedia communication tool, VoiceThread fosters collaborative learning and engagement by enabling students to create presentations, share multimedia content, and provide feedback through various modes, such as text, audio, or video comments (Dalat-Ward, Ward, Lester, & Tao, 2019). Importantly, VoiceThread (VT) supports asynchronous communication, enabling students to engage in discussions at their convenience and extending peer interaction beyond the physical classroom. This technological shift reflects a broader move toward embracing diverse learning styles, in which VoiceThread can become a key player by facilitating students' engagement and interaction outside traditional educational settings (Chang & Windeatt, 2021; Fox, 2017; Kirby, & Hulan, 2016; McCormack, 2010; Panettieri, 2013).

The demand for innovative educational tools is particularly acute due to Taiwan's aim to become bilingual by 2030. The national goal to boost English proficiency among educators and learners highlights the vital role of effective communication platforms in English as a Medium of Instruction (EMI) settings (Chang, 2010; Huang, 2012; Huang, 2020). EMI, the practice of using English to teach academic subjects in non-English speaking countries, requires the strategic use of digital tools to improve language skills and educational outcomes (Yeung, 2020; Chien, & Valcke, 2020). Despite progress being made in digital education, equipping students with English language proficiency to succeed in EMI classrooms remains challenging. This gap underscores the potential of VoiceThread to serve, not just as a tool for multimedia submissions, but as a catalyst to enhance interactive and communicative dynamics in bilingual instructional settings.

Given the imperative to elevate English proficiency and cultivate an immersive learning experience in EMI settings, the employment of a participatory action research (PAR) approach to assess the effectiveness of VoiceThread is proposed in this study. Hence, the aim of this research is to unravel the complexities of integrating digital tools in bilingual education by focusing on Taiwanese students' perception of the utilization of VoiceThread in their EMI courses. The participatory nature of the study emphasizes collaborative exploration and pedagogical refinement with the aim of improving EMI instructional practices. The investigation centers on two key research questions: what is the impact of the integration of VoiceThread in EMI courses on students' learning experience? and how can these insights guide the development of more effective teaching strategies in EMI business education?

The purpose of this study is to collaboratively explore the potential of VoiceThread to transform EMI classrooms by adopting a PAR framework. The intention is to shed light on how VoiceThread can reshape teaching practices and enhance language proficiency from the perspective of students from EMI business education programs. This research is expected to contribute to the design of more effective teaching strategies tailored to EMI learners, thereby advancing bilingual education initiatives and addressing the existing gap in the literature with regard to the integration of digital tools in educational settings.

Method

Research Design

The participatory action research (PAR) paradigm was adopted for this study, which was specifically designed to involve students as co-investigators to examine the impact of integrating VoiceThread into classroom dynamics with a focus on a Human Resource Management (HRM) course in an undergraduate dual degree program of Taiwanese and UK business schools. This method is aligned with the PAR principles, which emphasize collaboration between researchers and participants throughout the research process. According to Feekery (2023), PAR entails identifying problems, devising solutions, and implementing changes in conjunction with stakeholders. The participants' insights and expertise are valued in this approach, positioning them as key contributors to the research outcomes.

While PAR fosters active engagement and empowers the participants, it also presents challenges. These include the need for extensive collaboration and consensus-building, which can be extremely time-consuming and resource-intensive. Additionally, the need to balance researchers' expertise with the participants' perspectives may cause tension in the research process. Nevertheless, despite these challenges, the collaborative nature of PAR can generate meaningful outcomes that have an enormous impact, particularly in educational settings where the participants' experience provides deep insights into the effectiveness of a particular pedagogy.

Participants

The HRM course being studied comprised a cohort of ten sophomores that consisted of three international and seven domestic students, who were already familiar with web-based educational tools, which provided a solid foundation for the collaborative PAR approach. This diverse, yet cohesive, group offered a valuable context for assessing the impact of VoiceThread on EMI learning outcomes, thereby contributing to a richer understanding of its effectiveness in enhancing interactive experiences and pedagogical practices in a bilingual education environment.

Course Design

The research was conducted during a Human Resource Management (HRM) course, which is a crucial component of the undergraduate dual degree program in Business Administration offered by business schools in Taiwan and the UK. The aim of the course is to prepare students for careers in either general management or specialized HRM roles by encompassing various facets of HRM, such as recruitment, selection, placement, training and development, performance appraisal, and global practices. Over an 18-week period, VT was integrated into both in-class and out-of-class activities that included case study discussions conducted either individually or in groups. The participants were familiar with web-based learning and were acquainted with each other and the moderator.

Each session followed a structured format: (1) Introduction to ten technical terms, (2) Lecture supported by PowerPoint slides, (3) Case study analysis, (4) Individual or group discussions on the case study, reported through VoiceThread, and (5) Self-evaluation

facilitated by ten multiple-choice questions devised by the instructor.

Assessments were based on attendance, participation, performance of sixteen VT activities, and scores in the midterm and final exams. Classes were held in a traditional setting, with three one-hour sessions each week, where VT was effectively utilized to enhance the learning experience in the HRM course.

Course Implementation

The course was administered by an instructor who is proficient in using VT, having honed the skill in a complementary asynchronous workshop on the VT website, and it was supported by a single-site VT user license.

The link of the weekly VT activities was housed by a Moodle Learning Management System (LMS), which provided space for sophomore students to post direct comments. The instructor in this project wore multiple hats as participant observers, trainers, and curriculum designers. The integration of VT in the weekly in-class activities enabled students to resolve case studies, either individually or in pairs, and upload their voice or audio solutions. Additionally, students' ability to engage in weekly in-class or out-of-class VT activities, including discussing case study queries and reflecting on recent learning, fostered their ongoing engagement and application of newly acquired knowledge (see Figure 1).

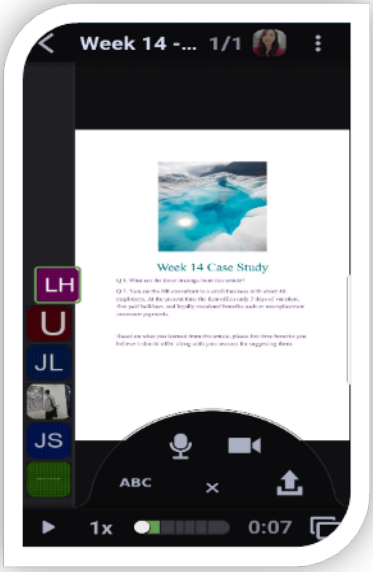

Figure 1 Screenshot of Course Implementation

The instructor guided them with necessary instructions, grading rubrics, and additional resources in each VT discussion module. At the beginning of the course, students' English oral communication skills were thoroughly evaluated by a Business English instructor. Their speaking abilities were classified on a scale from 1 to 3, with 1 indicating low proficiency, 2 representing average proficiency, and 3 indicating high proficiency. The initial assessment determined each participant's skill levels and subsequent systematic pairings each week promoted varied competencies within each group. Post-discussions, participants uploaded audio or video files of the sessions to VT using their mobile devices. They enjoyed the flexibility of deciding how to approach weekly assignments and the opportunity to practice more by creating and potentially discarding multiple attempts at each task. Final submissions, in either a video or audio format, were uploaded for evaluation and feedback by both peers and the instructor. If students missed an in-class activity deadline, they were given an extended window of a week to complete their activity. This encouraged persistent participation by enabling students to refine their response before the final submission.

Data Collection

A multifaceted data collection approach was employed to ensure the acquisition of a comprehensive understanding of the students' experience of integrating VoiceThread in the classroom. This approach incorporated reflective journals, focus group discussions, and direct classroom observations. Reflective journals provided a platform for students to express their personal reflections and insights of their usage of this digital tool. They shared their experiences, challenges, and perceptions of engaging with VoiceThread in regular journal entries, which facilitated the exploration of individuals' perspectives, offering rich qualitative data on students' interaction with the platform.

In addition to reflective journals, focus group discussions were conducted to encourage students to engage in-depth conversations. These discussions served as a collaborative space for participants to share their experiences, exchange ideas, and identify common themes. They gained deeper insights into the multifaceted aspects of using VoiceThread in an academic context by engaging in collective exploration. These methods were complemented by direct classroom observations, which pro-

vided contextual clarity on the integration of VoiceThread into the learning environment. By observing students' interaction with the platform in real-time, researchers gained valuable insights into the dynamics of students' engagement and collaboration during VoiceThread activities. Classroom observations also facilitated the identification of any technical challenges or issues the students encountered, providing additional content for the data analysis.

Data Analysis

After the data collection phase, the qualitative data obtained from the participants' reflective journals, focus group discussions, and classroom observations were subjected to a thematic analysis. This widely-used qualitative method entails identifying patterns and themes within the data to generate insights and gain a deeper understanding (Braun & Clarke, 2021). It provides researchers with a structured framework to systematically organize and interpret qualitative data.

The analytical process commenced with the researchers immersing themselves in the collected data to become familiar with the content and context before systematically coding it to identify information related to the pedagogical efficacy of VoiceThread. The codes were then sorted and organized into themes based on their relevance and significance to the research questions, and the themes were rigorously reviewed and validated against the data to ensure accuracy and reliability. Having been validated, the themes were defined and refined to capture the essence of the participants' experience of VoiceThread. Finally, the identified themes were compiled into a coherent analytical narrative, contextualized within the existing academic discourse of digital pedagogy in education. This methodological approach ensured that the exploration of the students' experience of VoiceThread was sufficiently comprehensive to contribute to a nuanced understanding of its impact in the classroom.

Ethical Considerations

Adherence to ethical standards was paramount. Hence, the participants' formal consent was obtained to ensure that they were aware of the study's scope, their right to privacy, confidentiality and voluntary participation. The participants' privacy was maintained throughout the research process by the rigorous anonymization of the collected data.

Results

The analysis of various data sources revealed key insights into the impact of integrating VoiceThread impactful into educational settings.

Enhanced Engagement and Interaction

VoiceThread has emerged as a pivotal tool to augment students' engagement and foster interactive learning environments. All the participants expressed profound sentiments when asked to define its transformative impact on their educational experience. For instance, a Taiwanese male student asserted that, "VoiceThread has transcended mere passive listening; it facilitates active discourse, inquiry, and connectivity in a manner unparalleled by traditional forums." Similarly, a Japanese female student remarked, "It engenders a sense of a collective learning community, gradually coalescing through vocal exchanges."

Improvement of Oral Communication Skills

Of notable significance was the discernible enhancement of the oral communication proficiency of the participants attributed to VoiceThread. Non-native English speakers particularly acknowledged the platform's role in bolstering their linguistic competence. A Taiwanese female student explained that, "While they were initially daunting, the self-recording sessions proved to be empowering as evidence of perceptible progress." Likewise, a Japanese female student reflected, "Feedback on my presentations not only honed my understanding of diverse cultural practices, but also fortified my confidence in effectively articulating my ideas."

Flexibility and Accessibility

VoiceThread's asynchronous functionality emerged as a cornerstone feature, lauded for its adaptability to students' diverse schedules and commitments. As a Taiwanese female student said, "The flexibility to engage in discussions at one's convenience was a transformative aspect, particularly for individuals juggling academic pursuits with professional obligations."

EMI Students' Speaking Anxiety

VoiceThread served as a pivotal platform for assuaging the English language speaking anxiety that was prevalent among English as a Medium of In-

struction (EMI) students. The participants attested to the platform's ability to provide a supportive environment conducive to language practice. A Japanese female student articulated that, "VoiceThread affords a safe space for self-paced practice, mitigating the apprehension associated with verbalizing thoughts in English."

Technical Challenges and Learning Curve

Although VoiceThread provides numerous benefits, minor technical challenges may be encountered in its implementation. The participants noted that complex navigation and occasional upload failures may require improvement for smoother usage. A Taiwanese male student remarked that, "Navigating VoiceThread initially seemed to be intricate, suggesting that more comprehensive introductory tutorials and a user-friendly design could be beneficial." Similarly, another Taiwanese male student observed, "Occasional upload failures on mobile devices may pose logistical hurdles, highlighting the potential importance of the course providing consistent technical support."

Moreover, the participants expressed a desire for additional features, such as more cute stickers or emoticons, to enhance their interaction. They proposed that the incorporation of these elements would add a fun aspect to the platform that could potentially alleviate frustration. This sentiment, which was particularly emphasized by a Taiwanese female participant, underscores the potential for enhancing users' experience of VoiceThread.

These testimonials of the participants underscored the potential of VoiceThread to foster an interactive learning environment, enhance students' language skills, and provide a flexible educational setting, while also highlighting the urgent need to address technical impediments for optimized utility.

Discussion, Conclusions and Recommendations

Discussion and Conclusions

This analysis revealed the complex relationship between VoiceThread's functionalities and students' linguistic abilities, underscoring the need for educators to adapt teaching methods to accommodate students with different linguistic backgrounds and promote inclusivity in educational frameworks. These insights resonated with various students'

perspective of the importance of collaborative learning (Chen & Bogachenko, 2023).

VoiceThread's adaptability indicates its potential for broader application in English as a Medium of Instruction (EMI) contexts, despite the fact that its initial focus was not on EMI education. The influence of culture on users' preferences was recognized in the study, suggesting that VoiceThread's integration in global educational settings requires a sensitivity to cultural differences. Enhancing VoiceThread with features that resonate with specific cultural usage patterns could elevate its effectiveness and user engagement internationally.

However, despite VoiceThread's offer of promising technological abilities, it confronts challenges related to user experience. These issues present opportunities for students to develop, particularly in terms of fostering resilience and oral communication skills that are essential for business education. The dual character of VoiceThread was highlighted in this study: its capacity for fostering collaboration and areas that need refinement, and its linguistic support to reduce barriers and create a more inclusive learning environment.

Various students' reactions to instructional tools were also illuminated in this study. These reactions had been shaped by their individual experiences, learning styles, and linguistic competencies. Despite these differences, there was a general consensus about the positive impact of VoiceThread on interactivity and learning. These findings offer critical insights for future research and practical application, aiding educators to refine their approaches to address diverse students' needs.

In essence, VoiceThread stands out as a transformative educational platform, especially for students familiar with passive learning. It leverages auditory and visual elements to encourage students' active participation, significantly improving learning outcomes. Its flexibility to support both verbal and written expressions allows students to effectively demonstrate their comprehension. Educational technology like VoiceThread promises to create personalized learning experiences for EMI students facing unique challenges as a varied student demographic. In conclusion, the success and transformative potential of VoiceThread depend on overcoming users' experience challenges and adapting to varied linguistic and cultural land-

scapes. VoiceThread can be a pivotal tool in enriching management education based on continuous assessment, updates, and customization in response to students' feedback.

Implications for Practices

The use of VoiceThread in educational settings can be refined to improve students' engagement and learning by implementing a series of strategic recommendations based on the following insights from this study that target both its technological capabilities and instructional methodologies;

1. Integrate Advanced AI Linguistic Technologies: The use of cutting-edge AI linguistic tools can directly address the linguistic obstacles identified in the study by significantly enhancing students' pronunciation clarity and accuracy.

2. Promote Group Interactions: The positive impact of collaborative learning can be leveraged by amplifying the group interactions within VoiceThread, thereby fostering a more dynamic and engaging learning atmosphere.

3. Implement Structured Oral Exercises: The inclusion of verbal exercises can provide students with consistent opportunities to practice and elevate their oral communication skills within a structured learning framework.

4. Provide Customized Feedback and Instructional Guidance: The delivery of detailed feedback and offer of explicit guidance early in the course, including audio/video recording templates or sample scripts, will equip students, particularly those in EMI settings, with the tools to navigate and surmount communication hurdles, thereby promoting a culture of continuous improvement and learning.

The implementation of these recommendations can significantly leverage the potential of VoiceThread to transform students' educational experience by addressing both the technical and pedagogical challenges identified in this study, and ensure that students have a richer and more inclusive learning journey.

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