ISSN 1799-2591
Theory and Practice in Language Studies, Vol. 15, No. 3, pp. 688-697, March 2025
DOI: https://doi.org/10.17507/tpls.1503.03

AI Technology Integration and Interpreting Practice in the Bilingual Video Project: Benefits and Challenges From Students' Perspectives

Ngoc Thi Nhu Nguyen
Faculty of English Linguistics and Literature, University of Social Sciences and Humanities, Vietnam National University Ho Chi Minh City, Vietnam

***Abstract*—With technological advancements, audiovisual translation (AVT) is increasingly crucial for enhancing students' competencies. This study explores students' perspectives on AI technology integration and interpreting practice in a multimedia project, i.e., producing a bilingual video (BV) in an interpreting course to practice AVT. The five-stage project involves *clip selection, plot rewriting, dubbing, simultaneous interpreting,* and *subtitling* with meaningful content and learning autonomy. It employs a mixed-methods approach, using a student questionnaire with both closed and open questions to investigate the perceived benefits and challenges in a BV project encountered by 54 third-year students of an English faculty in Vietnam. The findings indicate that the BV project can potentially enhance students' competencies with several benefits for developing engagement and performance concerning interpreting skills, confidence, teamwork, cultural awareness, creativity, AI technology skills, hands-on experience with real-world interpreting scenarios, and peer assessment. However, students face challenges in clip selection, script writing, and technical aspects of content production related to linguistic, cultural, technical complexities, and technological issues. This paper contributes to the ongoing literature, offering valuable insights into effectively utilizing multimedia projects to diversify interpreting practice.**

***Index Terms*—AI technology, interpreting practice, multimedia project, bilingual video, audiovisual translation**

I. Introduction

AI technology integration and translation practice have been evidenced in enhancing training methods and classroom practice and setting new trends. Interpreter training programs should acknowledge the impact of technology and update their curricula to reflect this shift (Fantinuoli & Prandi, 2018). Many senior lecturers agree that technology use is a significant change in the field of translation education, suggesting a direction toward more interactive, comprehensive, and technology-oriented educational settings (Khasawneh & Shawaqfeh, 2024). In recent years, audiovisual translation (AVT) has become more important due to the growth of multimedia technologies. Bolaños-García-Escribano and Botella (2023) highlighted the impact of AI technology on AVT, leading to increased accessibility and efficiency and enabling students to practice subtitling, dubbing, and voice-over translation using user-friendly platforms that replicate professional AVT environments.

Using AVT of short clips or videos is considered an effective training method to help students practice and improve their interpreting skills with real-world content. Cintas and Remael (2014) found that AVT tasks expose students to complex multimodal texts that combine sound, visuals, and spoken language, thus encouraging them to work with different forms of meaning-making systems. The multi-layered nature of audiovisual content helps students improve their competencies through language skill development and understanding of cultural nuances, employing different modes of communication and technical translation tools.

There exists a growing use of AVT with AI-driven technology in interpreting education. Shen (2017) emphasized the transformative potential of AI in teaching and learning in higher education, highlighting the imperative need for empirical studies to inform educational practices. Several studies (Božović, 2019; Wu & Chen, 2021; Manfredi et al., 2023; to name some) have been concerned with students' AVT projects, including translating and subtitling/dubbing a clip. However, there is little research on the whole process of rewriting, dubbing, translating (in the form of simultaneous interpreting), and subtitling to produce a bilingual video (hereby called **BV,** in short).

This paper aims to explore the benefits and challenges of AI technology integration and interpreting practice from students' perspectives through implementing BVs as a multimedia project in an interpreting course for third-year translation majors of an English faculty in Vietnam. Particularly, a transformative point providing insights beyond existing studies in this project is that the students are required to create new plots for short videos adapted from available films, aiming to boost students' creativity, flexibility, and adaptation. The research is then conducted to answer two research questions:

(1) *What benefits do students get from AI technology integration and interpreting practice for the bilingual video project?*
(2) *What challenges do students face in this process, and what solutions do students use to deal with them?*

The findings for these research questions highlight the role of hands-on, AI technology-driven projects like the BV one in interpreting courses to align with the diverse nature of the industry, showing the importance of practical, real-world applications to help students develop essential industry competencies.

II. Literature Review

A. AI Technology in Interpreting Education

AI technology has transformed interpreting education, leading to innovative teaching methods. The use of AI in interpreting education falls under Computer-Assisted Interpreter Training (CAIT), which gained recognition in the 1990s (Sandrelli & Jerez, 2007). In its early period, CAIT systems utilized digital speech banks and virtual learning environments to help students practice interpreting tasks. Until now, the AI's role in CAIT has expanded by offering intelligent systems that customize training exercises based on individual student needs and creating simulations resembling real-world interpreting scenarios. For example, teachers can employ AI-powered tools, such as speech-to-text technologies, for students to practice simultaneous interpreting (Ahmed, 2022); some AI-assisted tools like InterpretBank and Interplex are currently employed in interpreter training to assist students in managing specialized terminologies, memorizing vocabulary, and accessing terminologies during interpreting sessions (Tarasenko et al., 2022). Even more, the future of AI training interpreters is in developing immersive technologies like virtual reality, which can create real-life interpreting situations. Some training programs have tried virtual reality to help students feel how real and challenging it is (Pingping, 2023).

As mentioned above, AI technology has impacted interpreter training by introducing cutting-edge tools and methods for learning, including intelligent CAIT systems and AI-assisted glossary management. The overall trend of AI being integrated into interpreting practice has been evidenced with both benefits and challenges. In this study, we required students to remake an excerpt of a film into a bilingual one to measure how they could integrate AI technology and simultaneous interpreting practice, which may contribute to innovative teaching methods in the existing literature on interpreting education.

B. Multimedia Projects and Audiovisual Translation in Interpreting Education

Multimedia is the computer-based delivery of video, audio, written text, and graphics, integrating these media to enhance second language learning through interactive and multisensory experiences (Brett, 1995). Then, a multimedia project involves a combination of text, graphics, sound, animation, and video. It offers a platform where learners can engage with content in varied formats, supporting comprehension and language skills development (Liaskos & Diomidus, 2002). Research has shown that using monolingual and bilingual videos in language education is quite beneficial for teaching and learning.

In interpreting practice, multimedia projects involve audiovisual translation of short clips, enabling students to enhance their translation skills by engaging with real-world audiovisual content. This pedagogical method is expected to support students' linguistic knowledge and enhance their understanding of cultural nuances, semiotic modes, and technical translation tools. Baker and Maier (2011) emphasized that audiovisual content, particularly short clips, is a rich source of cultural and social references. When students translate such content, they enhance their intercultural communication competence by effectively conveying both language and cultural nuances. This process contributes a more comprehensive view of translation as an intricately embedded cultural practice. Thus, multimedia AVT projects serve as real-world simulations of professional tasks in the interpreting industry.

To be more specific, Cintas and Remael (2014) showed that AVT, such as subtitling and dubbing, enhances students' linguistic and technical competencies by exposing them to complex multimodal texts. It requires them to make decisions on linguistic translation and the synchronization of subtitles or dubbing with video and audio components. Subtitling has consistently been the most popular form of AVT due to its speed and cost-effectiveness as a method of media localization (Cintas & Remael, 2021). Using professional subtitling software like Aegisub or Subtitle Workshop in classrooms teaches students to handle AVT tools, work on synchronization, and manage space constraints effectively. Gambier (2013) affirmed that translators must be familiar with such tools to stay competitive in a rapidly evolving industry. Similarly, dubbing is also an important task in translating audiovisual content. It is a multimodal practice requiring careful adjustment to match the timing, emotion, and context conveyed by the characters in a clip (Cintas & Remael, 2014) and adaptation of cultural elements to make the translation more relatable to the target culture (Gambier & Pinto, 2018).

In the multimedia project of this current study, students were asked to rewrite the plot for their chosen clip, an excerpt from a certain film. This task differs from previous ones, where students were required to deal with an available film/video script, and what they would do was translating, dubbing, and subtitling. This plot rewriting task emphasizes students' flexibility, creativity, and adaptability in using language and interpreting skills, which is quite significant for their interpreting performance in future professional environments.

To clarify further, research shows that rewriting or creating a story helps students develop more advanced comprehension and interpretation strategies in projects. When they rewrite a plot, they interpret complex literary elements into relatable messages, enhancing their understanding of the original work's themes and nuances (Kroll, 1985). Rewriting requires understanding the cultural context in which a story was created, helping students navigate linguistic and cultural displacement. By addressing these differences, students learn to balance authenticity and adaptation to cross-cultural interpretations (Sun, 2007). Rewriting tasks can enhance students' cognitive abilities by improving their information reorganization, summarization skills, comprehension, and interpretation skills, especially when the content is tailored for different audiences or age groups (Singh, 2008). Rewriting requires creativity, especially when students must convey the core message of a story in new ways. Then, they can learn how to interpret stories beyond the literal level, allowing for multiple layers of understanding, including moral, cultural, and emotional interpretations (Weinstein, 2016). Thus, rewriting can improve students' interpretation abilities, understanding of cultural and contextual nuances, cognitive skills, and creativity. This is also an important reason for choosing this task, besides the others in AVT, for students in interpreting courses to practice in their BV projects.

III. METHOD

A. Research Design and Sampling

The research employed a mixed-methods approach for an exploratory case study. In detail, third-year translation majors were requested to implement bilingual video projects; then, a questionnaire containing both quantitative and qualitative questions was administered to them after the projects were completed and evaluated in the final class meeting. The students were enrolled in two classes of the course *Interpreting 1* at an English faculty in Vietnam, and the researcher herself was in charge of these two classes. Convenience sampling was used to select the participants. Fifty-four students were divided into eight groups of 6-7 members and worked as interpreter teams on real projects, i.e., *the BV project*, within two months. Prior to this course, the students completed prerequisite translation courses and participated in some project-based learning activities, which enabled the researcher to collect data grounded in their authentic perspectives and experiences. Ten students were asked for a pilot survey. Then, in the official questionnaire survey, the total number of participants was forty-four students.

B. Project Procedure

The students were first shown some bilingual video samples and given detailed guidance for the BV project. They were then informed about the requirements for data collection and product assessment, including the five criteria developed and adapted from Kroll (1985), Baker and Maier (2011), and Cintas and Remael (2014). The criteria are described as follows.

TABLE 1
CRITERIA FOR ASSESSMENT

Message	A central message is provided and evidently supported by plot details.
Plot rewriting	There is a complete story with a buildup and resolution, combining education and entertainment; Content is appropriate with the register and emotion of actors/ actresses; Grammar and lexical use are proper in the target language.
Dubbing	Dialogues flow naturally and express emotion as if spoken by native speakers; Noise and sound are controlled.
Simultaneous interpreting	Translation transfers the message and has a proper effect on meaning; The translation is qualified with the target language norm and the film style.
Subtitling	Lines are clear and intelligible for viewers; Lines match with voice actors/ actresses.

To meet the five criteria, the students were encouraged to employ AI-powered tools to qualify their products better. In this study, the BV is a form of film remake, i.e., a segment/ excerpt from a film available on the market and can be animated or live-action. The students would do the dubbing in their mother tongue, i.e., Vietnamese, and the subtitling in English to practice simultaneous interpreting.

The ideal length of a video in the classroom should be longer than 3 minutes and should not extend over 10 minutes (Harrison, 2015). Sharing teaching and learning through short videos within 10 minutes enables rich discussions in a secure environment and places greater emphasis on reflection, collaboration, and growth (Sterrett et al., 2014). Based on our experience in bilingual video production and assessment, a duration of 4-5 minutes is a good choice.

The implementation of the BV project lasted eight weeks and followed the guidelines outlined in Table 1. It also required integrating AI technology and interpreting practice during the following steps in the BV stages in Table 2.

TABLE 2
INSTRUCTION ON THE STAGES OF THE BV PROJECT

Week	Stage
1-2	*Film collection* Collect an authentic animated/ live-action film from online sources; Extract an excerpt from it with a time limit of 4-5 minutes.
3-4	*Plot rewriting* Discuss a message for the film excerpt and its target audiences; Create a new plot in Vietnamese for the film excerpt; Rewrite the film script.
5-6	*Dubbing* Discuss group work distribution (actors and actresses); Do the dubbing; Enhance the dubbing quality.
7	*Translation and subtitling* Discuss group work distribution (translators, editors, assessors); Translate the dialogues of all the actors and actresses from Vietnamese into English using CAT tools in need; Do revisions, check all the content and design of the subtitles, and proofread and self-evaluate both the design and the content, standing on the target audiences' position; Choose a layout, typography, color scheme, and graphics, and use relevant technological and graphic design tools for the subtitles.
8	*Production and assessment* Produce the BV with an appropriate format and requested duration for digital display, and share the BV in the class Zalo; Present a short description of the group's BV product and the rationale for its message, translation, dubbing, and so on; Display the BV on the screen for peer watching and assessment in the classroom. Conduct peer assessments within 20 minutes based on the given assessment guidelines; Receive peer and teacher feedback on the BV products and have some defense, if any.

C. Research Instrument

The research was conducted using an online student questionnaire. The official version was revised based on the pilot results and featured 22 items across two sections to address the two research questions. Each section included both Likert-scale and open-ended items, enabling a more thorough understanding of student perspectives on the benefits and challenges encountered during each stage of the BV project.

D. Data Collection and Data Analysis Procedures

The student participants were provided with a Google Form questionnaire and given a two-week timeframe to reflect on their experiences and provide thoughtful responses to the open-ended questions. Following this, the quantitative data is presented with mean scores ranging from 1.0 to 5.0 and processed with SPSS version 22. Based on thematic analysis, the qualitative findings are presented with the number of students sharing similar ideas in brackets. For example, "*real-world application of skills (25)"* indicates that 25 of 44 participant students believed that the BV project helped them to apply interpreting skills in real-time practice.

IV. RESULTS AND DISCUSSIONS

A. Research Question 1: What Benefits do Students Get From AI Technology Integration and Interpreting Practice for the Bilingual Video Project?

TABLE 3
BENEFITS FROM THE IMPLEMENTATION OF BILINGUAL VIDEOS

Item	Statement	Mean	Sd
1	I could improve my interpreting competence through the tasks of the BV project.	4.33	0.70
2	I could enhance my learning engagement through the tasks of the BV project.	4.33	0.70
3	I found using AI technology beneficial for my future career in interpreting.	4.58	0.51
4	I could enhance my ability to work with multimedia content.	4.33	0.70
5	I could enhance my accuracy in interpreting with AI technology support.	3.83	0.64
6	I could better understand real-world interpreting scenarios.	4.17	0.64
7	I could better understand cultural nuances in interpreting.	3.83	0.70
8	I felt more confident in my interpreting competence.	3.88	0.74
9	I could improve my interpreting competence thanks to the other group's assessment of our BV product.	4.25	0.68
10	I felt satisfied with the other group's assessment of our BV product.	4.04	0.87
11	I have an interesting overall experience with this project.	4.25	0.68

The mean scores vary from 3.83 to 4.33, with moderate standard derivations. This shows the participants' satisfaction and agreement with little variability in their perceptions for almost the ten items. Particularly, in Item 1 (M=4.33, SD=0.70) and Item 2 (M=4.33, SD=0.70), the students had a good engagement in the BV tasks, including rewriting,

dubbing, subtitling, and working with multimedia content, with high rates for the enhancement of their interpreting competence. This suggests that hands-on tasks are particularly effective in the learning process for interpreters. The use of AI technology in the BV project is highly beneficial for future career development, as participants recognize the relevance and importance of AI in modern interpreting practices (Item 3, M=4.58, SD=0.51; Item 4, M=4.33, SD=0.70; Item 5, M=3.83, SD=0.64). Item 6 (M=4.17, SD=0.64) shows that the BV project was effective in helping most of the participants relate to real-world interpreting scenarios, which is critical for preparing them for actual career challenges.

Items 7-8 (M=3.83, SD=0.70; M=3.88, SD=0.74) indicate students' overall positive understanding and confidence in interpreting cultural nuances and interpreting skills, but their higher standard deviations suggest variations in students' experiences and have some uncertainty, highlighting the need further training. In Item 9 (M=4.25, SD=0.68) and Item 10 (M=4.04, SD=0.87), most participants valued the peer assessment process; they showed their general satisfaction with the other group's assessment, but some might be less satisfied with the feedback they received. Their psychological reaction is quite understandable and similar to that of professional interpreters in reality. Item 11 (M=4.25, SD=0.68) indicates that most participants found the overall experience interesting. The moderate standard deviation suggests some variability, but overall, participants were engaged and found the project stimulated their performance.

To clarify the benefits that the students gained from the BV project from Item 12, *"How does the BV project enhance your engagement and performance in this interpreting course?"* the detailed explanations are provided with seven identified themes as follows.

- ***Real-world application of skills (25):*** Many respondents highlighted that the BV project provided practical, real-world applications of interpreting skills. In their words, the project provided *"real-world context and practical application of language skills"* and *"real-life scenarios to better understand the practical application of interpretation."* It allowed *"applying theoretical knowledge in a dynamic and interactive way," "struggling to match a technical term sharpened my real-time comprehension,"* and students could "*listen to the script and immediately interpret it into the target language."* These responses underscore the BV project's effectiveness in bridging theoretical knowledge and practical skill-building, fostering real-time problem-solving and learning experiences.
- ***Teamwork and collaboration (20):*** This aspect of the BV project is highly appreciated as it provided opportunities to work with peers and improve group working skills. The students stated that the project *"helped me to work with other members and knew how to support each other," "promoted collaboration among group members," "provided me with a chance to collaborate with new peers," "We worked on a child-friendly style of video, which required us to understand each other and collaborate on interpreting and dubbing," "I learned a lot from cooperating and making connections with my classmates,"* and *"The process of finishing the project through teamwork accumulated small but significant improvements in my skills."* Thus, the BV project improved interpreting skills by fostering teamwork through meaningful peer interactions.
- ***Technological, interpreting, and soft skills development (30):*** The BV project saw a significant development of students' technological skills (e.g., video editing, dubbing, subtitling, using new software and video editing applications, scriptwriting, voice-over), interpreting skills (e.g., short-term memory, real-time simultaneous interpretation, handling accents, and working with different languages, fast reaction), and soft skills (e.g., time management, problem-solving, multitasking, critical thinking), which contributed to their successful interpreting performance with more focus on tone, accuracy, and synchronizing speech with visuals, etc. Some students affirmed that the project helped *"develop my ability to process information from various sources simultaneously" and "improve my ability to use technology in the translation process." They* could deal with technological issues such as "*I managed to adjust the tone and loudness to match the characters," "Replaying scenes and characters' dialogues made my voice fit their voices improved my short-term memory," "The feedback to the English subtitles helped me improve my interpreting skills," "We had to multitask in the BV project, enhancing our interpreting competence under time constraints," "The actors in the clip spoke rapidly, forcing me to practice summarizing key points for clarity naturally,"* and *"The BV project challenged me to think on my feet and interpret real-world speech."* Obviously, the BV project provided a comprehensive learning experience, equipping students with essential technological, interpreting, and soft skills that enhanced their flexibility and adaptability in real-world scenarios.
- ***Cultural awareness (20):*** For many respondents, working on bilingual videos enhanced their cultural understanding. This helped them learn how to adapt translations to fit the cultural and contextual nuances of the source and target languages to overcome challenges with idiomatic expressions and puns. It also forced them to find creative solutions and significantly enhanced their interpreting skills. They said, "*Watching the video multiple times helped me grasp the nuances of both languages," "It fosters a deeper cultural understanding and appreciation of both languages involved," "It allowed me to see how language is used in different cultural settings," "We had to adjust certain phrases and examples to resonate better with the audience,"* and *"The process of translating lines exposed me to cultural differences and interesting ways of using words."* Working on BVs enhanced the students' cultural awareness, helping them deal with linguistic nuances and have better adaptability.

- ***Creativity and enjoyment (27):*** Many mentioned that the BV project allowed for a more dynamic, engaging, and enjoyable learning experience, thus boosting creativity, enjoyment, and accomplishment. For example, they stated that the project *"makes me more interested in this module compared to just interpreting in class," "makes me feel interesting and likely to find motivation,"* and *"helps me see new and more interesting things in the interpreting course."* Some respondents reported that the project was fun, enjoyable, and more engaging than traditional classroom activities. They also noted that completing the BV project gave them a sense of achievement, which motivated them to continue improving. They expressed, *"The project left space for creativity, allowing students to do more than just interpreting exercises," "During the process of writing the script and dubbing with friends, we had a lot of fun," "It makes me feel like I am a real voice actor,"* and *"Successfully interpreting the BV content can give me a sense of accomplishment and boost my confidence."* Thus, the BV project created a dynamic and enjoyable learning experience, increasing creativity and motivation.

Overall, the statistical results show that the student participants find the project engaging, practical, and beneficial for their career development, especially in AI technology and hands-on AVT tasks with multimedia content. In addition, the thematic analysis suggests that the BV project enhances engagement and performance through practical applications of AI-powered tools and interpreting skills, fostering creativity, promoting teamwork, and developing technological and cultural competencies. The enjoyable nature of the BV project further contributes to students' confidence in their interpreting performance.

The results are quite in line with previous ones. AVT projects like this BV can improve students' linguistic and intercultural competencies. Talaván (2020) pointed out that research has shown subtitling and revoicing audiovisual materials significantly enhance the acquisition, improvement, and refinement of the four key language proficiency skills, and these practices were essential for developing crucial intercultural competence. Adams and Díaz Cintas (2022) affirmed that activities such as subtitling, dubbing, or making videos can motivate students while enhancing their linguistic and intercultural skills; engaging with digital technology and various formats helps develop transferable skills and practicing translation as a mediating activity adds valuable educational benefits to AVT practices. Similarly, students' participation in active AVT activities, such as subtitling and revoicing videos, affects their motivation and stimulates their engagement (Talaván & Ávila-Cabrera, 2015). AVT also enhances students' autonomy and interaction because it is a powerful tool for accelerating independent learning when students can engage independently with AVT tasks under the teacher's guidance (Talaván et al., 2023); students in AVT projects participate more than in other types of tasks because they feel less constrained to participate when dubbing clips (Fernández- Costales, 2021). AVT helps students become more aware of the language and develop positive attitudes toward both the language itself and the learning process because they are encouraged to consistently engage with the language(s) they are working with for their continually reformulating, translating, paraphrasing, or recreating the language(s).

In short, the BV project brings considerable potential to enhance students' linguistic, intercultural, interpreting, and technological competencies through engaging and practical AVT activities. By integrating AI-powered tools and fostering collaboration, creativity, and self-assurance, the project aligns with existing research that highlights the educational benefits of AVT in developing language proficiency, cultural awareness, and transferable skills. These findings underscore the significance of incorporating AVT initiatives like this BV into language and interpreting education to facilitate both professional development and learning autonomy.

B. Research Question 2: What Challenges do Students Get From This Process, and What Solutions do Students Use to Deal With Them?

TABLE 4
CHALLENGES FROM THE IMPLEMENTATION OF BILINGUAL VIDEOS

Item	Statement	Mean	Sd
13	I find it challenging to choose a film excerpt and rewrite a new plot.	**3.48**	0.82
14	I find it difficult to use AI technology due to its technical complexity.	2.64	0.95
15	I feel over-reliant on technology when completing this project.	2.12	0.83
16	I find it difficult to ensure lip-sync accuracy for dubbed content.	**3.72**	1.10
17	I find it difficult to ensure consistent performance and tone of the original language.	**3.48**	0.96
18	I find it difficult to ensure readability by managing text length and display time.	**3.36**	1.19
19	I find it difficult to balance the content to avoid favoring one language over the other.	**3.60**	1.08
20	I found it difficult to assess the other group's BV product.	2.56	0.92
21	I found it challenging to accept the other group's comments on our BV product.	2.40	0.71

The statistics reveal varied levels of difficulty experienced by the student participants in integrating AI technology and interpreting practice in their BV projects. Item 13 (M=3.48, SD=0.82) indicates that many students faced difficulty selecting an available film, extracting an excerpt, and remaking it with a rewritten plot. Item 14 (M=2.64, SD=0.95) shows that technical complexity in AI gave them moderate difficulty, although the lowest mean score for Item 15 (M=2.12, SD=0.83) suggests that most participants did not have over-reliance on technology. Particularly, Items 16-19 (M=3.72, SD=1.10; M=3.48, SD=0.96; M=3.60, SD=1.08) show the most significant challenges in ensuring lip-sync accuracy and the content performance in English and tone of the Vietnamese language in the tasks of dubbing and simultaneous interpreting, as well as ensuring readability by managing text length and display time and balancing

content between the two languages in the task subtitling. The higher standard deviations in these items suggest that the students' experiences varied widely, with some struggling more than others. For the BV product evaluation, for Items 20-21 (M=2.56, SD=0.92; M=2.40, SD=0.71), there is a high level of agreement among participants that assessing other groups' BVs and accepting feedback from other groups is not challenging, and most of them found these tasks manageable.

Based on the findings, it can be inferred that the majority of student participants feel at ease using AI and are open to receiving feedback. However, they encounter certain difficulties with film selection, film script writing, and technical aspects of content production, especially in terms of synchronization and language balance in the tasks of dubbing, simultaneous interpreting, and subtitling. This highlights the need for better tools and specific support to help them overcome these challenges.

The students' responses to Item 22, *"What were your specific challenges in each stage of the BV implementation, and how did you deal with them?"* help to clarify their challenges and their solutions, if any, including:

- ***Stage 1 - Clip selection (11):*** Some students found it challenging to *select appropriate clips for the BV product to match their groups' expectations, agreements, and cultural context or fit the project requirements.* Some said it was really tough *"to find a video that matched with our ideas and script," "to find a clip that is engaging with enough dialogues, not too few or too many," "to come up with a plot that is perfectly fit with a short clip taken from a very long movie,"* and *"to selecting appropriate video clips that are engaging but are not too long or complex for the project scope."* Others mentioned: *"Our group members had many suggestions for choosing a suitable video, leading to the project taking longer than expected,"* and *"My group encountered a challenge of assigning the tasks because we had more members than the characters in the video."* These challenges require students to balance their creative choices with practical limits in group projects and also highlight the need for effective communication, compromise, and flexibility among team members, which is essential for learning autonomy.
- ***Stage 2 - Plot rewriting (15):*** Many respondents encountered *challenges developing plots for their BV products.* They explained there existed a lack of creative ideas, difficulty fitting the plot to the chosen video, and conflicts between team members over the plot direction. They considered the plot *"one of the trickiest and most challenging parts."* Some stated: *"My group found it difficult to come up with the plot, so we decided to brainstorm as many as possible," "We had difficulty in writing a plot summary as we did not have any particular idea or inspiration for the video," "There was a conflict between the members when we wrote the plot. We used a poll to vote for the favored."* As mentioned, this task has been of little concern in previous research on AVT. In this research, the students affirmed that developing plots for the BV project presented notable challenges. They then utilized collaborative strategies, including brainstorming and voting, to address creative blockages and resolve team conflicts. In fact, these challenges motivated them to find ways to reach a group consensus for new plot creation. This task contributed to the development of teamwork and problem-solving skills.
- ***Stage 3 – Dubbing (11):*** Some students had *problems with lip-syncing, voice acting, and matching the tone and timing of the original language.* They found it difficult to ensure *"accurate and synchronized dubbing," "accurate lip-syncing and voiceover quality,"* and *"the words match the mouth movements exactly when dubbing."* Some stated, *"Dubbing is kind of hard as we are not professional voice actors,"* and *"It's hard to imitate the actor's tone."* The dubbing process really took a lot of students' time and effort and, thus, demanded technical precision and creative adaptability.
- ***Stage 4 - Simultaneous interpreting and subtitling (24):*** A few students struggled with subtitling, particularly in terms of *timing, synchronization, and condensing dialogue while maintaining accuracy and emotional nuance* (4). They opined, "*subtitling is quite hard for our group because it takes lots of time to put the subtitles in an ideal time."* To deal with this issue, some groups used professional subtitling software that allowed precise timing and synchronization. Some others mentioned *the difficulty of interpreting actors' words due to fast-paced speech or accents, which made it challenging to capture and subtitle every word accurately* (8). They stated: *"Fast-paced speaking or strong accents in the BV project sometimes made it challenging to catch every word perfectly for subtitles,"* and *"Actors may use regional accents or dialects that differ from standard language forms."* Many others thought that the cultural and linguistic differences between the source and target languages made it *hard to find equivalent phrases or convey the cultural meaning accurately in subtitles, especially when actors use idiomatic expressions, slang, and colloquialisms (12).* They said: *"Due to the differences between the source and target language, sometimes there were some idioms in the source language, but I cannot find the equivalence in the target language," "Some dialogues were difficult to translate naturally while retaining the meaning and cultural context,"* and *"Interpreting the actors' and actresses' words for subtitling was challenging due to the rapid pace of natural conversational speech, the use of idiomatic expressions and slangs."* In addition, a few students found it difficult to *interpret the emotional nuances and deliver the characters' emotions and tones in subtitles* (6); for example, they had issues such as mumbling and sounds of animal characters. The students' reflections highlight the complex challenges of simultaneous interpreting and subtitling, requiring a

careful balance of technical skill, linguistic flexibility, and cultural awareness to achieve precise and meaningful translations.

- ***Stage 5 - production and assessment (21):*** Some students faced *technological issues (5)* related to video editing, dubbing, or using new software for the project. They said: *"Most of my challenges arise from my lack of knowledge in using new video editing programs."* They dealt with it by *"utilizing professional dubbing software and conducting multiple rehearsals"* and *"using professional subtitling software."* They also expected that teachers should give *"more instructions on dubbing techniques/skills"* and *"suggestions for some tools or apps or websites to erase the original voices and dub into the target language"* and introduce them to *"some apps or websites to assist editing the video quickly."* These responses show that students need adequate resources, guided instruction, accessible tools, and practical support to effectively navigate technical challenges and enhance their video editing and dubbing skills. For the project assessment, a few respondents highlighted *the subjective nature of the assessment, noting that differences in opinion, personal biases, and varying levels of language proficiency could impact evaluations (4)*. In their opinions, *"Assessing interpretation and subtitling involves a degree of subjectivity," "Ensuring a fair and unbiased assessment can be difficult, especially if the assessors have personal connections to the groups or individuals involved,"* and *"Different evaluators might have different opinions on what constitutes an accurate or effective translation."* Others reported that their *difficulty in assessing the BV product stemmed from a lack of experience or insufficient understanding of the BV content (5)*. Thus, some suggested *more detailed rubrics and evaluation criteria (7)*; for example, they expected these *"should be explained in descriptive sentences"* to help them produce higher-quality work and perform peer evaluations. Although not many students require more detailed evaluation rubrics and criteria to minimize subjectivity and ensure fair and consistent assessments, a more transparent and supportive environment for both learning and evaluation should be clearly set up.

However, many students in some groups reported *smooth progress without obstacles (23)*. They affirmed their *satisfaction with this activity*, saying: *"We actually worked quite smoothly and didn't encounter any challenge," "I think our group didn't suffer from any particular major obstacle," "From my standpoint, the project was a complete success,"* and *"I really like the experience I had when doing this project."* The students' reflections affirm that the BV project was a rewarding experience, marked by smooth collaboration and satisfaction with both the process and the outcomes.

The thematic analysis reveals that the most prevalent challenges encountered by groups in their BV project were centered around selecting appropriate clips, plot writing, interpreting, and subtitling. The task of selecting suitable clips stemmed from the necessity to align content with the project's scope and group dynamics. Plot development proved another challenge as groups struggled to generate creative ideas and reach a consensus on the storyline. Furthermore, dubbing presented issues with lip-syncing, voice acting, and maintaining the characters' original tone. Some groups encountered difficulties finding appropriate translation equivalents for interpreting and subtitling, as well as technical aspects such as video editing. During the BV implementation, they endeavored to find solutions. They also expected more comprehensive instructions from teachers on dubbing and the introduction of tools, apps, or websites to elevate the quality of their tasks. The analysis also highlights that most students had little difficulty assessing the other group's BV product. Encouragingly, some groups reported smooth collaboration without significant challenges, suggesting that group dynamics and technical skills varied widely across teams. Overall, their clarification about specific challenges completely matches and affirms the quantitative findings in Table 4.

To some extent, the results are supported by some previous studies. Linguistic and technical challenges are the most common ones in AVT. For example, students find it difficult to translate allusions (i.e., references to people, places, customs, or events that carry cultural or contextual significance (Guillot, 2019); they often face difficulties in managing linguistic nuances and technical aspects of subtitling, such as segmentation and reading time constraints (Martins & Ferreira, 2019); subtitling challenges involves linguistic and technical features because there exist different communicative layers in languages (Cintas & Remael, 2021); they also struggle with translating cultural references and maintaining semantic accuracy in subtitling and dubbing tasks (Thawabteh & Al-Adwan, 2021); redundancy exists among "looks, gestures, facial expressions, and language," demanding attention during the development of translation strategies and thus requiring students to prioritize their efforts in the post-editing phase to address such nuances effectively (Cintas & Remael, 2014, p. 50). Many previous studies indicate that providing students with more training and resources for ATV projects is essential. In fact, there exists a lack of sufficient training programs and resources for subtitling and dubbing, which hinders students from meeting professional standards (Granell, 2011). Also, technological challenges, such as a lack of familiarity with professional AVT tools and software, add to the difficulty of completing projects efficiently due to rapid advancements in subtitling that require translators to adopt new techniques with adaptability and flexibility for success in this field (Cintas & Remael, 2021).

In short, although most students are comfortable with AI support and receptive to feedback, the BV project identified specific areas where further support is needed - particularly in film selection, scriptwriting, technical elements such as dubbing and subtitling, and translation issues related to linguistic and cultural nuances. The student participants did not suggest many solutions to all their challenges. However, such challenges in the BV project highlight the necessity for

targeted teacher guidance and access to tools that can enhance both the creative and technical aspects of content production. Also, applicable suggestions can be adapted from relevant studies in AVT.

V. Conclusion

Multimedia projects are valuable for teaching practical skills that aspiring interpreters need. Focusing on the incorporation of AI technology and translation practice, this study explored the implementation of a structured BV project specifically designed for an interpreting course, with five interconnected stages: (1) film collection, (2) plot rewriting, (3) dubbing, (4) simultaneous interpreting and subtitling, and (5) production and assessment.

Based on the quantitative and qualitative insights into the students' perspectives of the BV project, the findings reveal several significant benefits, including the development of learning engagement, interpreting skills, confidence, teamwork, cultural awareness, creativity, AI technology skills, multimedia content skills, hands-on experience with real-world interpreting scenarios, and the improvement from peer assessment. Most student participants are comfortable using AI and are receptive to feedback. However, they face specific challenges related to film selection, script writing, and technical aspects of content production. It is particularly evidenced in synchronization and language balance during dubbing, simultaneous interpreting, and subtitling tasks, rooted in the linguistic and cultural complexities that arise during translation and the technological hurdles that require them to adapt to new AI tools. As Cintas and Remael (2021) stated, the AVT field is rapidly evolving, requiring students to stay updated with the latest tools and methodologies, which can be challenging in an educational setting. Thus, addressing these obstacles is crucial for optimizing the learning process and ensuring that students can fully benefit from integrating AI technology.

This paper tries to provide valuable insights by illustrating how multimedia projects can effectively weave AI technology into the fabric of interpreting training. By equipping students with essential skills tailored for a rapidly evolving technological landscape, such initiatives pave the way for the cultivation of highly competent interpreters ready to deal with the increasing demands of the industry.

References

[1] Adams, H. & Díaz Cintas, J. (2022). Special issue: Audiovisual translation in the foreign language classroom – Introduction. *Revista De Lenguas Para Fines Específicos*, *28*(2), 10–15. http://doi.org/10.20420/rlfe.2022.548

[2] Ahmed, S. (2022). Artificial intelligence in simultaneous interpreting training: an experimental study of speech-to-text technology. *CDELT Occasional Papers in the Development of English Education*, 271–300. https://doi.org/10.21608/opde.2022.265693

[3] Baker, M., & Maier, C. (2011). Ethics in interpreter & translator training: Critical perspectives. *The Interpreter and Translator Trainer*, *5*(1), 1–14. In M., Baker & C. Maier (Eds.) (2011), *Ethics and the Curriculum: Critical Perspectives*. St Jerome Publishing.

[4] Bolaños García-Escribano, A., & Botella, C. (2023). Introduction: New Trends in the Theory and Practice of Translation and Interpreting. Transletters. *International Journal of Translation and Interpreting*, *7*(1), 1–8. https://doi.org/10.21071/tlijti.v1i7.15523

[5] Božović, P. (2019). How Should Culture Be Rendered in Subtitling and Dubbing? A Reception Study on Preferences and Attitudes of End-Users. *Babel*, *65*(1), 81–95. https://dol.org/lo .107s/babeI.00082.boz.

[6] Brett, P. (1995). Multimedia for listening comprehension: The design of a multimedia-based resource for developing listening skills. *System*, *23*(1), 77–85. https://doi.org/10.1016/0346-251X(94)00054-A

[7] Cintas, J. D., & Remael, A. (2014). *Audiovisual translation: Subtitling*. Routledge. https://doi.org/10.1016/0346-251X(94)00054-A

[8] Cintas, J. D., & Remael, A. (2020). *Subtitling: Concepts and practices*. Routledge. https://doi.org/10.4324/9781315674278

[9] Fantinuoli, C., & Prandi, B. (2018). Teaching information and communication technologies. *A proposal for the interpreting classroom. trans-kom*, *11*(2), 162–182. Retrieved September 17, 2024, from http://www.trans-kom.eu/bd11nr02/trans-kom_11_02_02_Fantinuoli_Prandi_Teaching.20181220.pdf

[10] Fernández- Costales, A. (2021). Subtitling and dubbing as teaching resources in CLIL in Primary Education: The teachers' perspective. *Porta Linguarum*, *36*, 175–192.

[11] Gambier, Y. (2013). The position of audiovisual translation studies. In *The Routledge Handbook of Translation Studies* (pp. 45–59). Routledge.

[12] Gambier, Y., & Pinto, S. R. (Eds.). (2018). *Audiovisual Translation: Theoretical and methodological challenges* (Vol. 95). John Benjamins Publishing Company. https://doi.org/10.1075/bct.95

[13] Granell, X. (2011). Teaching video game localisation in audiovisual translation courses at university. *The Journal of Specialised Translation*, *16*(7), 185–202. Retrieved September 17, 2024, from https://core.ac.uk/download/pdf/61408449.pdf

[14] Guillot M.-N. (2019). Subtitling on the cusp of its futures. In Perez-Gonzalez L. (Ed.). *The Routledge Handbook of Audiovisual Translation* (pp. 31–47). Routledge. https://doi.org/10.4324/9781315717166

[15] Harrison, D. J. (2015). Assessing experiences with online educational videos: Converting multiple constructed responses to quantifiable data. *International Review of Research in Open and Distributed Learning*, *16*(1), 168–192. https://doi.org/10.19173/irrodl.v16i1.1998

[16] Khasawneh, M. A. S., & Shawaqfeh, A. T. (2024). Breaking Traditional Boundaries in Translation Pedagogy; Evaluating How Senior Lecturers Have Incorporated Digital Tools to Enhance Translation Teaching. *World*, *14*(4), 154–165. https://doi.org/10.5430/wjel.v14n4p154

[17] Kroll, B.M. (1985). Rewriting a Complex Story for a Young Reader: The Development of Audience-Adapted Writing Skills. *Research in the Teaching of English*. https://doi.org/10.58680/rte198515645
[18] Liaskos, J., & Diomidus, M. (2002). Multimedia technologies in education. In *Studies in health technology and informatics*, *65*, 359–72. DOI: 10.3233/978-1-60750-909-7-359
[19] Manfredi, M., Nannoni, C., & Pugliese, R. (2023). Audiovisual translation and media accessibility in language learning contexts. *Translation and Translanguaging in Multilingual Contexts*, *9*(2), 143–159. https://doi.org/10.1075/ttmc.00106.man
[20] Martins, C., & Ferreira, C. (2019). Project-Based Learning in Audiovisual Translation. *Journal of Approximation Theory*, *2*(1), 152–182. https://doi.org/10.47476/JAT.V2I1.109
[21] Pingping, H. (2023). Business Interpreter Training in the 3D Virtual Reality Environment: A Pilot Study in China. *Scholars International Journal of Linguistics and Literature*, *6*(3), 169-176. https://doi.org/10.36348/sijll.2023.v06i03.001
[22] Sandrelli, A., & Jerez, J. de M. (2007). The Impact of Information and Communication Technology on Interpreter Training: State-of-the-art and Future Prospects. *The Interpreter and Translator Trainer*, *1*(2), 269–303. https://doi.org/10.1080/1750399X.2007.10798761
[23] Shen, M. (2017). Teaching translation: programs, courses, pedagogies. *Perspectives*, *25*(4), 684-687. https://doi.org/10.1080/0907676X.2017.1376443
[24] Singh, K. (2008). Retelling Strategies for Comprehending and Interpreting Short Stories. *Journal of Modern Languages*, *18*(1), 89-107.
[25] Sterrett, W., Dikkers, A. G., & Parker, M. (2014). Using brief instructional video clips to foster communication, reflection, and collaboration in schools. *The Educational Forum*, *78*(3), 263-274. Routledge. https://doi.org/10.1080/00131725.2014.912370
[26] Sun, Y. (2007). Displacement and intervention: Re-creating literary texts through cross-cultural translation. *Neohelicon*, *34*, 101-114. https://doi.org/10.1007/S11059-007-2009-3
[27] Talaván, N. (2020). The didactic value of AVT in foreign language education. In L. Bogucki & M. Deckert (Eds), *The Palgrave Handbook of Audiovisual Translation and Media Accessibility* (pp. 567-591). Basingstoke: Palgrave Macmillan. https://doi.org/10.1007/978-3-030-42105-2_28
[28] Talaván, N., Lertola, J., & Fernández-Costales, A. (2023). *Didactic Audiovisual Translation and Foreign Language Education*. Taylor & Francis. https://doi.org/10.4324/9781003293958
[29] Tarasenko, R., Amelina, S., Semerikov, S., & Shen, L. (2022). Computer-assisted interpreting systems in the education of simultaneous interpreters. *SHS Web of Conferences*, *142*, 1-9. https://doi.org/10.1051/shsconf/202214203003
[30] Thawabteh, M., & Al-Adwan, A. (2021). The intricacies of voicing over documentaries from English into Arabic: implications for translator training. *Heliyon*, *7*(7), e07302. https://doi.org/10.1016/j.heliyon.2021.e07302
[31] Weinstein, S. (2016). Values Education Through Aggadic Stories: The Didactic Rewriter as Interpreter. *Journal of Jewish Education*, *82*(1), 54-80. https://doi.org/10.1080/15244113.2016.1136990
[32] Wu, Z., & Chen, Z. (2021). A systematic review of experimental research in audiovisual translation 1992–2020. *Translation, Cognition and Behavior*, *4*(2), 281-304. https://doi.org/10.1075/tcb.00056.wu

Ngoc Nhu Thi Nguyen, Ph.D., is currently Vice-dean cum Chair of the Department of Translation and Interpreting at the Faculty of English Linguistics and Literature, University of Social Sciences & Humanities, VNUHCM, Vietnam. She has been an English teacher and a part-time translator since 1997. She was also a co-author of some ESP textbooks. Her main research interests are English Teaching, Translation Studies, Comparative Linguistics, and Intercultural Communication. She has some publications in EFL teaching and translation studies. ORCID ID: https://orcid.org/0000-0002-5015-2841