Enhancing Engagement and Autonomy in Advanced Japanese Learning as the Second Language through AI-Assisted Video Production

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Article Info	Abstract
	This study delves into the integration of generative AI in second language acquisition, particularly focusing on advanced Japanese learners' autonomy and motivation enhancement through video production. Drawing from Japan's educational guidelines and prior research, the investigation examines the roles of generative AI in language education, emphasizing ethical considerations and strategies for effective integration (Mollick & Mollick, 2023). The course implemented a hybrid approach, combining language instruction with media production, where students created YouTube videos in Japanese. Their productions were supported by AI tools for language correction, narration, and content generation. Results indicate that while AI facilitated practical language learning, instructor guidance remained crucial for ensuring accuracy and contextual appropriateness. The study highlights challenges such as overreliance on AI-generated content and the need for nuanced communication in prompt engineering. Despite these challenges, students demonstrated cultural understanding and improved nonverbal communication skills through video production. Future research aims to analyze students' reflections on their experiences, shedding light on their insights and future applications of AI in language learning.

Introduction

With Japan's Ministry of Education, Culture, Sports, Science, and Technology having released guidelines on generative AI (2023), the adoption of AI for use in autonomous learning methods is increasingly recognized within language education. The media creation process—including vital practices such as interviews and translation exercises—is essential for developing advanced language proficiency. Video production is particularly esteemed as an essential tool for expanding traditional communication channels, bolstering interactive skills, and nurturing media literacy (Minamide, 2017). This study explored the educational potential of generative AI–supported second language acquisition through video production, focusing on the enhancement of motivation and autonomy among advanced Japanese learners.

Focusing on learners at an East Coast university in the US with N2 or N1 level proficiency in the JLPT (the latter being the apex of proficiency), the research investigated generative AI's potential roles and ways instructors might

regulate its ethical and efficient use. Mollick and Mollick (2023) examined the incorporation of large language models (LLM) in education, highlighting both their advantages and pitfalls. Mollick and Mollick (2023) suggested seven roles for generative AI integration—tutor, coach, mentor, teammate, tool, simulator, and student—each designed to enrich learning while mitigating generative AI's challenges, such as errors and biases. Discussion considers strategies for active oversight of and student engagement with generative AI to support learning and not supplant human teaching.

The study also reviews the significance of prompt engineering in Japanese (Tohsaku, 2023), looking at its integration with generative AI in advanced Japanese media production coursework. In anticipation of AI literacy becoming more integral to our technologically advancing society, this study examines a conversation on sustainable education and innovative strategies meeting the needs of a diverse, evolving educational landscape.

Moreover, amidst concerns in language education about diminishing independent thinking and authentic language practice, this study emphasized the importance of AI literacy—the ability to critically analyze and selectively adopt AI suggestions. The study foregrounds qualitative research into whether AI use in video production can promote autonomous learning and enhance communicative abilities in advanced second language learners, analyzing student interactions and creations during the video production process.

Even in the age of AI, as Kubota and Miller (2017) suggest, humility and sensitivity to context remain paramount when dealing with language. Therefore, instructional design that empowers learners to engage in critical thinking for the second language (Sato et al., 2018) and autonomously evaluate AI suggestions becomes essential. This will ensure that learners maintain the discernment needed to navigate the complexities of language use in AI environments. These concerns make up the objectives of the research.

Targeted Course

This study focuses on an advanced Japanese language course offered during the sixteen-week spring semester of 2024 at a private university on the East Coast of the United States. The subjects are advanced Japanese learners at the N2 or N1 level of the Japanese-Language Proficiency Test (JLPT) who enrolled in the course with permission from the instructor, following a placement test at the beginning of the spring semester. After a fall semester focused on input-centered instruction aimed at passing the JLPT, the spring semester emphasized output-centered, practical instruction to determine the applicability of the knowledge acquired for the JLPT. Furthermore, through interactions inside and outside the classroom, the course taught learners to create their own YouTube videos, aiming to improve their language knowledge and operational skills. This involved acquiring knowledge and skills in media production in Japanese, completing individual media projects, and gaining insights through evaluations and critiques from others (Fujishiro & Hozaki, 2018). Course sessions occurred twice a week for ninety minutes each in a hybrid format that considered the convenience of learners who needed to use computers for media production. In addition to the Japanese course instructor, a media studies instructor from Japan was invited as a guest lecturer to support video production through video lectures and online discussions on platforms such as Zoom and the Ed Discussion board.

In the first half of the course, students received instruction to present a summary of the previous lecture in Japanese for about ten minutes in the next class, focusing on insights gained independently, followed by questions from classmates to encourage dialogue. In the latter half, the students chose a significant theme and created three YouTube videos related to that theme, each under ten minutes, over a period of one week per video. After creating each YouTube video, they posted it on the Ed Discussion board, and the instructor, guest lecturer, teaching assistants, and classmates commented. In each class, students shared a ten-minute reflection on the production process of their YouTube video. All these processes were conducted in Japanese, their second language. The rules for YouTube production were as follows:

- Create three videos (either a series or standalone)

- Each video must be at least five minutes but no more than ten minutes in length

- Include at least one interview with a Japanese person (in any of the three videos)

- Add Japanese subtitles

- Upload the videos to YouTube as "Unpublished"

- Meet all deadlines

- Be mindful of media and AI literacy

- Obtain formal written permission for filming and interviews

- Avoid plagiarism

The course concluded with a video production presentation. The audience submitted feedback through surveys and a question-and-answer session, and the students' reflective reports (of about 3,000 Japanese characters) also considered these data. Four students participated in this course; Table 1 lists their backgrounds and the YouTube videos they produced.

Table 1. Students' Background and YouTube Content

Student	Background	YouTube Content
Student A	Studied Japanese for four years and worked as an intern in Japan. Computer sciences major.	The cuisine of three countries: India, America, and Japan
Student B	International graduate student from China, holding the N1, the highest level of the JLPT	The history and present state of travel of Japanese people
Student C	Holds the N1, the highest level of the JLPT, and has experience studying at a Japanese university	Information and sharing experiences for Japanese people who want to study abroad at a college/university in the US
Student D	International graduate student from China, holding the N1, the highest level of the JLPT	The explanation video on cultural misunderstandings related to dining etiquette in Japan and China

Analytics Method

This course is situated in the innovative field of the integration of second language learning with video production and AI. The complex phenomena observed pose challenges for quantitative analysis. Drawing on ethnographic research (Murakami, 2013), which allows for descriptive observation while simultaneously deepening understanding through interpretation and meaning-making, created individual field notes for each student. They compiled these notes from interactions outside of class as well as from class discussions, posts on Ed Discussion, PowerPoint presentations of reports, and behaviors within the produced YouTube videos from February 3 to April 10, 2024. The profile matrix enables bidirectional analysis (Kuckartz, 2014). Horizontally, it allows for a comprehensive view of statements made by specific individuals, and vertically, it facilitates the examination of descriptions by two instructors regarding specific themes (Fujishiro & Hozaki, 2018). In this study, the vertical axis comprised four students, and the horizontal themes were narrowed to two for qualitative investigation: "Encouraging Second Language Learner's Autonomy by Using AI" and "Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production."

Results

Students' YouTube Contents

Because of a profound interest in Japanese cuisine and its presence in the United States, Student A produced a video series tailored to Japanese audiences. The series presented Japanese dishes prepared at home, explored Japanese restaurants in the US, compared Japanese and American culinary traditions, and examined Japanese dishes that have been adapted to American tastes.

Initially, the student cooked Japanese curry at home and filmed the process, motivated by three key factors: curry originated in India, the student's home country; upon its introduction to Japan, curry underwent adaptation to suit Japanese tastes; in the US, curry is further modified to incorporate certain American ingredients, adding a unique twist. The student believed that curry exemplifies intercultural exchange among Japan, the US, and India. The student then created the inaugural video, *アメリカでの日本料理冒険！「日本・アメリカ・インド」カレー合体* "A Japanese Culinary Adventure in the US! Combining Indian, Japanese, and American Curry" (translated by the author, Ohsawa) (see Figure 1). In this video, Student A demonstrates the process of cooking curry from start to finish while explaining food cultures from Japan, the US, and India. At the conclusion of the video, the student invites friends to try the homemade curry and give their opinions.

Following this, the student brought friends to a sushi-go-round restaurant in the US and recorded a second video, *アメリカでの日本料理冒険！これはアメリカの回転寿司です。* "A Japanese Culinary Adventure in the US! This is a Sushi-go-round in the US" (translated by the author, Ohsawa) (see Figure 2). In this video, the student and the friends order from the menu and compare the appearance, ingredients, prices, and ordering systems to those found in Japan.

Finally, Student A interviewed a friend who had previously lived in Japan to ask about their experiences with Japanese cuisine. From this interview, the student created a third video, *アメリカでの日本料理冒険！味の交流：日本とアメリカの食文化対話* "A Japanese Culinary Adventure in the US! Taste Exchange—Discussing the Distinctive Food Cultures of Japan and the US" (translated by the author, Ohsawa) (see Figure 3). In this video, the student poses five questions to the interviewee: did your dietary habits change when you moved to Japan?; which type of restaurants did you most often go to in Japan: Japanese restaurants or restaurants serving cuisine of other countries?; what do you think about Japanese restaurants in the US compared to those in Japan?; what do you think about American restaurants in Japan compared to those in the US?; what American restaurants do you recommend to Japanese people who want to visit the US?

Figure 1. Screen Capture from Student A's YouTube Content #1

Figure 2. Screen Capture from Student A's YouTube Content #2

Figure 3. Screen Capture from Student A's YouTube Content #3

Student B produced a video series about the history of modern Japan from the perspective of Japanese travelers worldwide to share this student's field of study with others. The student believed that the history of Japanese people's travel abroad reflects the history of Japan itself; physical experiences such as travel broaden people's perspectives and liberate them from stereotypes and prejudices. Furthermore, the significance of travel evolves with changing times. Student B used ChatGPT 4.0 and Google Docs to script the video, generated AI narrations with VOICEVOX, used Canva to create motion graphics, and automatically inserted captions with CapCut.

As a start, Student B retraced the travels of Akiko Yosano, one of Japan's most renowned poets, in China, based on her 1930 travel book, and produced the inaugural video, *旅行するなら、どこに行きたい？動画１：昭和時代に日本文化人の海外旅行*" If You Were to Travel, Where Would You Like to Go? Video 1: Overseas Travel by Japanese Cultural Figures during the Showa Era" (translated by the author, Ohsawa) (see Figure 4). In this video, the student briefly introduces the results of attitude surveys about Japanese people's travel and then recounted Akiko Yosano's surprise upon encountering the stark differences between her preconceived notions of China and the reality of the country during her visit.

Next, the student retraced the travels of Japanese journalist Katsuichi Honda in the southern US during the 1970s and created the second video, *旅行するなら、どこに行きたい？動画2：日本人の戦後海外旅行* "If You Were to Travel, Where Would You Like to Go? Video 2: Japanese Postwar Overseas Travel" (translated by the author, Ohsawa) (see Figure 5). In this video, the student provides a brief overview of the history of Japanese travel and introduces Katsuichi Honda's thoughts on the surprising reality in the area.

Lastly, Student B interviewed two students of Japanese descent who were raised in the US. Following the interview, the student created the third video, *旅行するなら、どこに行きたい？動画３：現在日本人の海外旅行* "If You Were to Travel, Where Would You Like to Go? Video 3: Current Japanese Overseas Travel" (translated by the author, Ohsawa) (see Figure 6). In this video, the student asks the Japanese students four questions: what country most impressed you as a travel destination?; did you notice any significant differences between your

preconceptions about that country and your actual experience?; did any unexpected events or surprising experiences occur during your trip?; what anecdotes or experiences can you share regarding the local culture and customs?

Figure 4. Screen Capture from Student B's YouTube Content #1

Figure 5. Screen Capture from Student B's YouTube Content #2

Figure 6. Screen Capture from Student B's YouTube Content #3

Student C produced a video series for Japanese students who want to take a first step toward studying abroad in the US. After returning to the US from studying abroad in Japan, the student explained the information international students should know before going abroad with students from Japan. As a result, the student incorporated that information into YouTube video creation. Originally, Student C planned to make these videos more formal, wearing a professional business suit, but they changed their mind and instead chose a casual atmosphere as if having a friendly conversation with the audience.

Figure 7. Screen Capture from Student C's YouTube Content #1
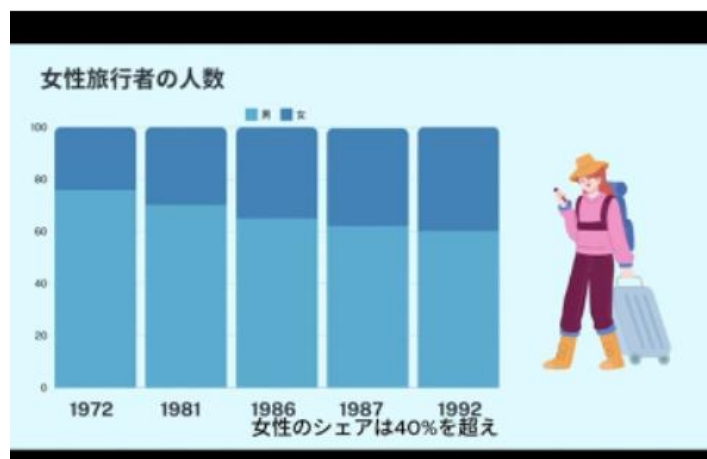

Figure 8. Screen Capture from Student C's YouTube Content #2

Figure 9. Screen Capture from Student C's YouTube Content #3

To educate students about the essentials of studying abroad, Student C first created the inaugural video, *留学への第一歩１：交換留学してみようかな？* "First Step to Studying Abroad, 1: Shall We Try Exchange Study?" (translated by the author, Ohsawa) (see Figure 7; to protect the privacy and rights of the individuals depicted in the video, the faces in the included photographs have been blurred). In this video, the student introduces their background and experiences and discusses topics such as selecting a city and a school, completing application forms, obtaining a passport and visa, securing accommodation in a student dormitory or homestay, and managing the essential aspects of daily life, such as opening a bank account and accessing a smartphone SIM card.

The student next arranged an interview with a Japanese student studying in the US to ask about their experiences. Following the interview, Student C created the second video, *留学への第一歩２：交換留学生の本音！* "First Step to Studying Abroad, 2: Candid Thoughts of Exchange Students!" (translated by the author, Ohsawa) (see Figure 8). In this video, Student C poses five questions to the Japanese student: why did you decide to study abroad?; what is your most enjoyable memory of the experience?; what do you wish you had known before you came to study abroad?; what cultural differences did you find most difficult to understand?; what advice do you have for students who want to study in the US?

Finally, Student C recorded a vlog-style selfie video depicting a typical day in their own campus life. This led to a third video, *留学への第一歩３：ペンシルベニア大学での１日！* "First Step to Studying Abroad, 3: A Day at the University of Pennsylvania!"(translated by the author, Ohsawa) (see Figure 9). In this video, the student documents a typical day, from waking up, attending classes on startups and advertising/marketing, using student facilities, meeting and studying with friends, to returning home at the end of the day and going to bed.

Student D produced a video series to clarify misunderstandings about table manners in Japan and China. The student's field of study was East Asian studies, and during discussions with Japanese individuals, the student discovered numerous misunderstandings between different cultures. Additionally, the student found that even if they were interested in cultural differences, people lacked access to theses and books. Given the contemporary preference for online video content over traditional research papers, the student chose to make use of YouTube to disseminate accurate information about cultures, focusing on Japan and China.

First, the student aimed to correct a misunderstanding that in China, it is considered good manners to leave a little food on your plate when finished eating. The student created the inaugural video, *なるほど！日中の食事マナーエピソード１：中国"残す食文化"について* "I See! Dining Etiquette in Japan and China—Episode 1: About the Chinese 'Leaving Food' Culture" (translated by the author, Ohsawa) (see Figure 10). In this video, the student interviews one Japanese person and two Chinese people through VRChat and Zoom. The interviewees' appearances and backgrounds are replaced with virtual ones.

The student then focused on the cultural practice of slurping noodles in Japan, leading to a second video, *なるほ*

ど！日中の食事マナー エピソード2：日本"麺をすする食べ方"について "I See! Dining Etiquette in Japan and China—Episode 2: About the Japanese 'Noodle Slurping' Eating Style" (translated by the author, Ohsawa) (see Figure 11). The student introduces the history of this cultural practice and presents the results of surveys conducted to gauge the opinions of both Japanese and international individuals. The video draws on a number of copyright-free illustrations.

Finally, to elucidate the commonalities and differences in chopsticks and table manners between Japan and China, the student created a third video, なるほど！日中の食事マナー エピソード3：日中のお箸マナーについて "I See! Dining Etiquette in Japan and China—Episode 3: About Chopsticks Etiquette in Japan and China" (translated by the author, Ohsawa) (see Figure 12). In this video, the student demonstrates appropriate ways of using chopsticks and a bowl in Japan and China.

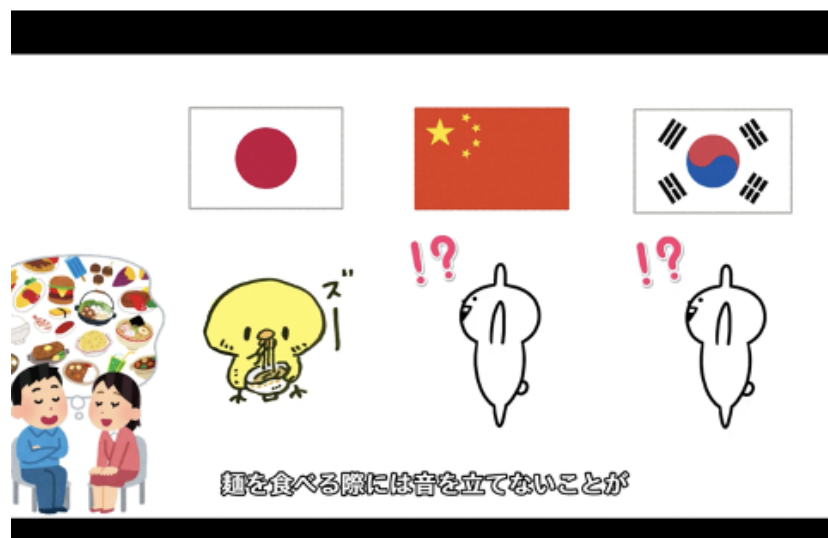Figure 10. Screen Capture from Student D's YouTube Content #1

Figure 11. Screen Capture from Student D's YouTube Content #2

Figure 12. Screen Capture from Student D's YouTube Content #3

Profile Matrix for Each Student

The following tables outline the profile matrix for each student. As all dialogues between students and instructors are conducted in Japanese, the language used in each profile matrix within the table will also be Japanese. The English version translated by the author, Ohsawa, follows the Japanese version. Using ChatGPT, Student A created an official permission letter in proper Japanese for filming at the sushi restaurant. This student also studied the Japanese style of YouTube content creation by watching videos of Japanese YouTubers and then incorporating similar techniques into the student's own content for a Japanese audience (see Table 2 and 3).

Table 2. Student A's Profile Matrix

Encouraging Second Language Learner's Autonomy by Using AI			Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production		
Ed discussion	**In class**	**PPTs, Videos**	**Ed discussion**	**In class**	**PPTs, Videos**
2024/02/03 まず自分で考えずにAIに全てを委ねる使い方をしないように注意しているいか。AIが翻訳したり文章を作ったりする場合、自分で真偽を確かめ	**2024/03/13** ChatGPTによる承諾書作成。	**2024/04/10** CG制作ソフトBlenderを使って撮影現場を再現することで、撮影現場に行かずにカメラの位置などを決められた。CGキャラクターモデルと、手の動き	**2024/02/07** 日本人向けのビデオを作るために意識的に特別なテロップや効果音を入れる必要があります。 **2024/02/19** 先生が言った通り私は自分の友	**2024/03/13** 動画内での第三者との会話が良いコンテンツとなった。文法と発音の間違い。 **2024/04/10** 日本語によるクラスでの発表活	**2024/02/24** 前は自分でカレーライス作って自分だけで食べるつもりだったけど先生たちのフィードバックを踏まえてそれを友だちと一緒に食べることにしました。

Encouraging Second Language Learner's Autonomy by Using AI			Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production		
Ed discussion	**In class**	**PPTs, Videos**	**Ed discussion**	**In class**	**PPTs, Videos**
ているか。 AIが作ったコンテンツの文化的な適否を確認しているか。 **2024/02/06** 真偽を確かめるために生成AI以外の道具で調べた方がいいと思います。 **2024/02/19** 動画１のタイトルは、私のバックグラウンドを表現するために「『アメリカ・インド・日本』カレー合体」の方がいいと考えていますが、どう思いますか。		を読み取るカメラLeap Motionを使ってVtuber風の動画を制作でき、編集が楽になった。編集ソフトDaVinci Resolveでノイズキャンセルをした。ChatGPT 4.0で文法や単語、メールや承諾書などの書き方の確認ができた。YouTubeサムネイル画像を作るのはうまくかなかったが、テロップのデザインのコードを書かせることができた。編集そのものに時間がかかった。	だちを誘って試食してもらうことにします。 **2024/02/19** 「筋」ですが普通の「muscle」という定義以外に「source」という意味で「筋」はあまり使われていないのですか。	動自体が日本語上達に役立った。	**2024/03/03** テロップが横長すぎるのは視聴者の視線誘導の負担になる。 **2024/04/10** 映像のテーマに沿った材料や料理の語彙を学ぶことができた。リサーチの中で、日本語メディアを日本語のまま理解できるようになった。

Table 3. Student A's Profile Matrix (Translated by the author, Ohsawa)

Encouraging Second Language Learner's Autonomy by Using AI			Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production		
Ed discussion	**In class**	**PPTs, Videos**	**Ed discussion**	**In class**	**PPTs, Videos**
2024/02/03 Do not use AI without thinking for yourself. When AI translates or creates text, do you check the authenticity of the translation or text yourself? Check the cultural authenticity of AI-generated content. **2024/02/06** It is better to use tools other than AI to check for authenticity. **2024/02/19** I think the title of video 1 should be "'American-Indian-Japanese' Curry Combination," to express my background	**2024/03/13** Use ChatGPT 4.0 to create an acceptance letter.	**2024/04/10** By using the CG production software Blender to recreate the shooting location, we were able to determine camera positions and other details without having to do location scouting. We used CG character models and Leap Motion, a camera that reads hand movements, to create Vtuber-like videos, which made editing easier. We used the editing software DaVinci Resolve for noise cancellation. ChatGPT 4.0	**2024/02/07** To make a video for a Japanese audience, we need to consciously include special captions and sound effects. **2024/02/19** As my teacher suggested, I will invite my own friends to sample the food. **2024/02/19** Is "Suji" used much in the sense of "source," other than the usual definition of "muscle"?	**2024/03/13** Conversation with a third party in the video provided good content. Some grammar and pronunciation errors persisted. **2024/04/10** The class presentation activity itself, in Japanese, helped me improve my own Japanese.	**2024/02/24** At first, I'd planned to make my own curry and rice and eat it by myself, but based on the instructor's feedback, I decided to share it with my friends. **2024/03/03** The caption is too long horizontally, which can be overwhelming for the viewer's eye movement. **2024/04/10** I learned vocabulary related to the ingredients and cooking that was relevant to the theme of the video. I have improved my Japanese language skills in my research

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Ed discussion	**In class**	**PPTs, Videos**	**Ed discussion**	**In class**	**PPTs, Videos**
What do you think?		allowed me to check grammar and vocabulary, and it showed me how to write emails, consent forms, and so forth. ChatGPT 4.0 proved inadequate in creating YouTube thumbnail images, but it did allow me to write code for caption design. The editing itself took a long time.			to the point that I can understand Japanese media in Japanese.

Student B used ChatGPT to compose emails in suitable Japanese, taking into account the particular relationships between the sender and recipients. In the video narrations, Student B replaced some older, more traditional Japanese phrases and sentences with contemporary, easily understandable ones (see Table 4 and 5).

Table 4. Student B's Profile Matrix

Encouraging Second Language Learner's Autonomy by Using AI			Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production		
Ed discussion	**In class**	**PPTs, Videos**	**Ed discussion**	**In class**	**PPTs, Videos**
2024/02/05	**2024/03/13**	**2024/03/25**	**2024/02/07**	**2024/03/13**	**2024/02/19**
資料を翻訳する場合は、まず自分が資料を全文	テキスト読み上げAIソフトで音声をすべて自動生	今回のナレーションはAIじゃなく、自分でやったこと	先生の言う通り、ターゲット層を結ぶことが大切なの	動画の内容が素人にも分かりやすく表現されてい	絵コンテのセリフが古文調で非常に難解。

Encouraging Second Language Learner's Autonomy by Using AI			Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production		
Ed discussion	**In class**	**PPTs, Videos**	**Ed discussion**	**In class**	**PPTs, Videos**
翻訳して、翻訳された段落をAIに「綺麗に直しなさい」ということだけを頼む。 **2024/02/07** まずAIが生成された意見を読んで、他のサイトでリサーチしながらアイデアの独創性を検定します。その後、独創なアイデアがあっても自分が作った内容を比べて間違えたことだけを直します。 **2024/03/02** ChatGPTを使う時、メールの相手と私の関係をしっかり説明しなかったので、丁寧すぎるメールを書いてしまいました。先	成。 　Canvaでアニメーション生成。 音声から字幕を自動生成。 ChatGPT 4.0で古文を現代文に翻訳。 AI音声の声質や抑揚が不自然。 自動生成したテロップの区切りが不自然な部分が多い。 AIが漢字の読み方を勝手に間違えてしまう。	で動画のクオリティーが上がったと思います。	で、どんな知識量を持っている人に向かって、自分の専門知識をどうやって届くか、これは一番考えるべきことです。 **2024/03/02** 最初はただ自分が研究したものを日本語で発表したがったが、課題は多すぎるので、具体的に何を伝えたいか悩んだことがあります。やはり、日本人に対し、どうして旅行のテーマが重要だということを最初からしっかり説明しなければなりません。	た。 自分で作成したスクリプトだったため、動画1の中で丁寧語とタメ語が切り替わる部分があった。	**2024/02/24** 同じ立場の学生相手に拝啓敬具は使わない。 **2024/03/11** テキスト読み上げAI音声を活用。 AI音声の声質を変えることでキャラクター（男女）を分けた。 字幕の区切り箇所が不自然。 AI音声の不自然さを払拭しきれていない。 日本語漢字の表記、、漢字の読み方で不正確な点がある。 **2024/03/25** 字幕の区切り方が動画1と比べてとても自然で読みやすい。 字幕の日本語の

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Ed discussion	In class	PPTs, Videos	Ed discussion	In class	PPTs, Videos
生の言う通り、具体的な状況を提示したら、もっとふさわしいメールが出来ました。					修正が必要。**2024/04/10** 日本語の漢字、日本語で長い文章を書く能力が向上。

Table 5. Student B's Profile Matrix (Translated by the author, Ohsawa)

Encouraging Second Language Learner's Autonomy by Using AI			Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production		
Ed discussion	In class	PPTs, Videos	Ed discussion	In class	PPTs, Videos
2024/02/05 When translating material, I first translate it in its entirety, and then I ask the AI only to "clean up" the translation. **2024/02/07** First, I read the opinions generated by AI and verify the originality of the ideas by researching other sites. Then, even when the idea is original, AI	**2024/03/13** Used text-to-speech AI software to automatically generate all audio. Canva generated animations. Automatically created subtitles from the audio. Used ChatGPT 4.0 to translate older expressions into more modern text. The AI's	**2024/03/25** The video quality was enhanced by my dubbing the narration myself this time, rather than relying on AI.	**2024/02/07** As the instructor said, it's important to connect with the target audience. So, we should consider how to deliver our expertise to audiences with certain amounts of knowledge. **2024/03/02** At first, I just wanted to present my research in Japanese, but I faced too many complications,	**2024/03/13** The videos were presented in a way that was easy to understand for the layperson. Because I created the script myself, a part of video 1 switched between polite and casual language.	**2024/02/19** The storyboard dialogue is difficult to understand because of its archaic style. **2024/02/24** Do not use "Dear Sir or Madam" in emails to students in the same position as me. **2024/03/11** Used text-to-speech AI voice. Distinguished the characters (male and female) by

Encouraging Second Language Learner's Autonomy by Using AI			Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production		
Ed discussion	**In class**	**PPTs, Videos**	**Ed discussion**	**In class**	**PPTs, Videos**
compares it with the content it created and corrects only the mistakes. **2024/03/02** Using ChatGPT, I wrote an email that was overly polite because I didn't clearly explain to the AI the relationship between myself and the recipient. When, as the instructor suggested, I presented the specific situation to the AI, I generated a more appropriate email.	voice quality and inflection felt unnatural. Automatically generated subtitles bring numerous unnatural limitations. AI misreads kanji characters without assistance.		and I had difficulty deciding what exactly I wanted to convey. After all, I have to explain clearly from the beginning why the theme of travel is important to Japanese people.		changing the tone of the AI voice. The subtitle breaks were unnatural. The unnaturalness of the AI voice remains. I noted inaccuracies in the notation of Japanese Kanji characters and in the reading of those characters. **2024/03/25** The way the subtitles are parsed is natural and easy to read, compared to video 1. The Japanese subtitles need to be corrected. **2024/04/10** Improved knowledge of Japanese Kanji and ability to write long sentences in Japanese.

Student C asked about ChatGPT's recommended topical sequence. Student C struggled to select the appropriate honorifics in various contexts but gradually improved in their understanding of Japanese word choices related to a specific situation (see Table 6 and 7).

Table 6. Student C's Profile Matrix

Encouraging Second Language Learner's Autonomy by Using AI			Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production		
Ed discussion	**In class**	**PPTs, Videos**	**Ed discussion**	**In class**	**PPTs, Videos**
2024/02/12 AIに文法などをチェックしてもらう場合には、私が前もって書いたスクリプトであるかチェックする。内容の中に、誤った情報が入っていないかチェックする。翻訳が必要な場合は、私が翻訳したのとAIがしたのと比べてみる。AIを使った場合には、AIを使った、と書いておく。テーマの中に私がまだ調べてみな	**2024/03/13** AIに話すトピックの内容、順番を聞いた。AIにタイトル案を聞いたら全く関係ないタイトルばかり出してきたのでやめた。**2024/04/10** ChatGPTに企画書や承諾書のフォーマット、動画タイトル案を聞いて、最終的に採用できるものが提示された。			**2024/03/10** 日本ではとても重要になるのが私の住所とFAXを入れるところですね（メール署名について）。**2024/03/13** 画面構成を調整し伝えたい情報を入れられた。もう少し丁寧語のレベルを下げてカジュアルに話しても良い。**2024/04/10** 日本人視聴者を意識し、Fraternityなど日本人に馴染みの無いワードの説明をテロップで表示。状況に応じた敬語の使い分けが学べた。	**2024/03/11** カタカナ英語や日本語漢字の表記で不正確な点がある。**2024/03/26** カジュアルを意識したのがはっきりと伝わる。文化的なところで、最初の挨拶のところは、お友達はちゃんと座っていて自分だけあぐらをかいているのが気になる。

Encouraging Second Language Learner's Autonomy by Using AI			Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production		
Ed discussion	**In class**	**PPTs, Videos**	**Ed discussion**	**In class**	**PPTs, Videos**
かった話題があ るかチェックして みる。				（教員の指導あり）	

Table 7. Student C's Profile Matrix (Translated by the author, Ohsawa)

Encouraging Second Language Learner's Autonomy by Using AI			Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production		
Ed discussion	**In class**	**PPTs, Videos**	**Ed discussion**	**In class**	**PPTs, Videos**
2024/02/12 When I ask AI to check grammar, I ensure that it is my own script. If I need to translate, I will compare my translation with that of the AI. When translation is needed, I will compare my translation with the AI's. If I use AI, I will clearly state that I did. Check whether AI suggested themes that I have not yet researched.	**2024/03/13** I asked the AI what topics to talk about in the video, and in what order. I asked the AI for title suggestions, but it generated unrelated, unusable titles. **2024/04/10** I asked ChatGPT for a proposal, consent form format, and video title suggestions that I could adapt.			**2024/03/10** In Japan, it is important to include address and fax number as part of email signature. **2024/03/13** I could adjust the screen layout and include the information I want to convey. I could have reduced the level of politeness and spoken more casually. **2024/04/10** With the Japanese audience in mind, I	**2024/03/11** There are some inaccuracies in katakana English and Japanese Kanji characters. **2024/03/26** The visuals clearly convey casualness. Culturally, I am concerned that at the first greeting, your friend is sitting properly, and only you are sitting cross-legged.

Encouraging Second Language Learner's Autonomy by Using AI			Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production		
Ed discussion	In class	PPTs, Videos	Ed discussion	In class	PPTs, Videos
				captioned explanations of words unfamiliar to Japanese, such as "fraternity." With guidance from the instructor, I learned how to use honorifics appropriate to the situation.	

Student D used ChatGPT to write email requests for interviews in proper Japanese format. Furthermore, the student added definitions to some terms in their videos that Japanese viewers might not be familiar with, in order to render the video content easier for Japanese audiences to understand (see Table 8 and 9).

Table 8. Student D's Profile Matrix

Encouraging Second Language Learner's Autonomy by Using AI			Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production		
Ed discussion	In class	PPTs, Videos	Ed discussion	In class	PPTs, Videos
2024/02/05 生成AIが出力する情報の事実確認をしているか。 **2024/02/12** 自分が適切な画面を撮るのが難しいや不可能	**2024/03/13** 取材依頼メールをAIで作成。ナレーション台本をAIにチェック、修正させた。字幕を手作業で入力するのは時間がかかった。次	**2024/03/12** VRChatやZoomの背景、アバターを使って世界観を表現している。		**2024/03/13** 取材のアポと撮影。中国語、英語話者それぞれに日本語発音のクセがあるため、それを直すとより良	**2024/03/12** 専門用語（光盤行動）についてテロップで注釈を加えていて分かりやすい。日本語漢字の表記で不正確な点がある。

Encouraging Second Language Learner's Autonomy by Using AI			Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production		
Ed discussion	In class	PPTs, Videos	Ed discussion	In class	PPTs, Videos
な時に、AI写真・動画を使う可能性があります。	は自動生成機能を使いたい。**2024/04/10** AIによる自動字幕機能では文章の切れ目などが不正確で、結局自分で修正する必要があった。			い発音になる。	**2024/03/25** 内容そのものが日本人にとっても気付きを与えるもので興味深い。日本語で気になったところや、修正できるところは修正して。**2024/04/10** 自分でナレーションを何度も録音し、ベストなものを使用、または編集で調整。日本語を流暢に話す練習となった。取材依頼メールや承諾書、脚本の作成により日本語のコミュニケーション能力なども上達。

Table 9. Student D's Profile Matrix (Translated by the author, Ohsawa)

Encouraging Second Language Learner's Autonomy by Using AI			Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production		
Ed discussion	**In class**	**PPTs, Videos**	**Ed discussion**	**In class**	**PPTs, Videos**
2024/02/05 Has the AI-provided information been fact-checked? **2024/02/12** AI photos and videos may be used when it is difficult or impossible for me to take appropriate original images.	**2024/03/13** AI generated the interview request email. AI checked and corrected the narration scripts. Inputting subtitles manually proved time-consuming. Next time, I want to use the automatic generation function. **2024/04/10** The automatic subtitling function by AI was inaccurate, in terms of sentence breaks and other grammatical aspects. Eventually, I corrected them myself.	**2024/03/12** I've used VRChat and Zoom backgrounds and avatars to represent the world of the video.		**2024/03/13** The interview appointment and filming went well. Each Chinese and English speaker has their own Japanese pronunciation quirks that can be corrected for better pronunciation.	**2024/03/12** The caption annotates terms for clarity. Some inaccuracies are present in the notation of Japanese Kanji characters. **2024/03/25** The content itself is interesting to Japanese audiences. Please correct what you notice and what can be corrected regarding the Japanese language. **2024/04/10** I recorded my own narration many times and used the best version or refined it with editing. It was an exercise in

Encouraging Second Language Learner's Autonomy by Using AI			Improving Second Language Communication Skills of the Advanced Second Language Learners through Video Production		
Ed discussion	**In class**	**PPTs, Videos**	**Ed discussion**	**In class**	**PPTs, Videos**
					speaking Japanese fluently. I also improved my Japanese communication skills and other skills through writing interview request emails, consent forms, and scripts.

Conclusions and Implications for Future Study

The results clearly suggest that students progressively learned practical Japanese through the process of producing YouTube videos. The use of AI, not only for Japanese language correction but also for visual elements and brainstorming ideas, proved beneficial in small class settings. Students also developed in their ability to critically assess AI suggestions based on their own inquiries and feedback from presentations and peers. The final confirmation of whether AI suggestions were accurate, contextually appropriate, or suitable for the nuanced speech styles of various Japanese contexts, however, required the assistance of instructors. Therefore, while AI can serve as a substantial support tool in second language learning and be used for autonomous learning, instructor guidance, and advice continue to be essential for final judgments on unfamiliar experiences or unknown knowledge.

From the perspective of AI use, we observed an overreliance on AI-generated Japanese subtitles among students. There was also a noticeable increase in students using AI suggestions directly, without personal revision. The ability to generate optimal prompts appeared to correlate with communication skills, as students who failed to verify their work independently and did not engage thoughtfully in dialogue with others produced not only incorrect Japanese but also inappropriate copyright declarations, which required last-minute corrections prompted by instructors. This was proportional to the instances in which students failed to provide adequate prompts to AI, highlighting the importance of delicate communication, and thus the significance of prompt engineering.

Regarding the video production process, one student excessively used an AI narration app instead of recording their own voice, which hindered their improvement in spoken Japanese proficiency. The practice of speaking through video production could not be effectively used, suggesting that future restrictions on the use of AI narration apps may be needed.

Through video production, however, students deepened their understanding of Japanese culture and adjusted their filming techniques to match the preferences of their target audience. This ability to adjust nonverbal communication skills suggests that, as with traditional language skills, they should be valued and assessed similarly in the future. Going forward, this study intends to analyze reflection reports generated through students' YouTube productions to explore the insights learners have gained through this research and the ways they plan to apply AI for autonomous language learning in the future.

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