

Combining Generative AI and Video Production to Enhance Language Skills

ChatGPT as a Tool for Authentic Dialogue Evaluation and Creation in EFL Video Production

This study explores the integration of generative AI, specifically ChatGPT, into the scriptwriting process for English as a Foreign Language (EFL) learners engaged in video production. Previous research indicates that video production in a second language (L2) enhances language learning (Lam & Yunus, 2023) and digital literacy (Lacy, 2018). Additionally, generative AI technologies have been shown to improve L2 learning capabilities (Ruan et al., 2021). This study combines these areas by investigating how ChatGPT can assist EFL learners in writing authentic dialogues. The participants were university students enrolled in a Content and Language Integrated Learning (CLIL) curriculum. They had diverse levels of experience in video production—mostly regarding social media. However, none had prior experience in scriptwriting or video production in English. The students had also never been trained in English on how to write prompts to ChatGPT. During the study, the participants were required to write their own dialogue for the video without the assistance of AI. Once they wrote the dialogue, the students were instructed on how to input commands to ChatGPT to provide feedback on their dialogue and more natural alternatives, contributing to more effective language learning and digital literacy development in the context of video production.

Slideshow Layout

1. Introduction

- a. Last year, I started noticing something that all of you probably also encountered. My students, who just a week before couldn't string together two grammatically correct sentences, were suddenly writing perfect paragraphs with uncommon vocabulary. Even more so, they couldn't seem to explain what these new vocabulary words meant! It was like they were hit with an English gamma ray and became fluent English writers for a few moments, and then once the effects wore off, they were back to their regular CEFR A2-B1 levels. Of course, when I questioned them, they admitted to using ChatGPT to write their essays. ChatGPT can be a useful tool when used appropriately. If the students are relying on it to write everything from scratch, the information will not be learned. That's why I decided to show my students this year how they can use ChatGPT as a language-learning tool without using it as a language-learning avoidance tool.

2. Examples of students' videos from South Korea

- a. The students found value in creating short videos together with their peers, but they had a difficult time writing their scripts. They wanted to include natural expressions and correct their grammar. This was quite a few years before ChatGPT was a household name, and I was available to help the students during the scriptwriting and editing process. However, I recently started thinking about my most recent groups of students and their reliance on ChatGPT. How could I facilitate the use of ChatGPT in our CLIL program, which is more like TOEFL prep in disguise?

3. Module Outline

- a. All first-year students in our Faculty of Liberal Arts program must complete two semesters of English classes, 6-Koma a week. All students learn from the same in-house created modules. The modules last for about 5 weeks each and cover the following topics in order:
 - i. First Semester:
 1. Health and Medicine
 2. Zoology
 3. Natural History
 - ii. Second Semester
 1. Earth Science
 2. Economics
 3. Sociology
 - iii. December – January
 1. The individual teachers can create their own materials for the students to wrap up the academic year. This year, I will have the students create a short video related to the modules. They will need to write a script related to one of the topics and film it together with their classmates.
- b. The modules are split into three core classes, each focusing on one aspect of the materials—Reading, Listening, or Grammar. In the listening classes, which I

personally designed, the students listen to (fabricated) short lectures on topics within the module and then listen to short conversations between students that also contain information related to the module. Here is an example of a lecture and an example of a conversation from the Health and Medicine Listening Module.

Script Listening for Learning 1.1–Lifestyle Diseases Lecture

Lecturer: Good morning, everyone! I hope you enjoyed our nice long weekend. Do you all remember what we spoke about before the break? No? Okay, let me remind you. In the last class, we discussed the importance of nutrition and how it impacts our overall health. Today, we're going to shift our focus to lifestyle diseases, which are a significant part of public health.

Lifestyle diseases, also known as non-communicable diseases, are mainly caused by our daily habits and the environment we live in. They are often the result of factors such as poor diet, lack of exercise, high levels of stress, and tobacco use. With this in mind, can anyone give me an example of a lifestyle disease? Yes, JiHee?

JiHee: Diabetes is a lifestyle disease, right?

Lecturer: Exactly, well done. Diabetes, especially Type 2 diabetes, is a perfect example because it's often related to diet and physical activity. Now it is important to remember that just because someone suffers from a lifestyle disease, it doesn't mean they are lazy. Many factors, including genetics, environment, and access to healthcare and information, play significant roles in these conditions. Let's keep an open and understanding perspective. Now, can someone try another example of a lifestyle disease?

Masahiro: What about the common cold?

Lecturer: That's an interesting guess, but the common cold is actually an infectious disease, not a lifestyle disease. It's caused by germs, specifically a virus, not by our lifestyle choices. That brings me to another point. Remember how I said lifestyle diseases are also called non-communicable diseases? Non-communicable means that the disease isn't contagious. It can't be spread to another person. If I have lung cancer, you won't catch lung cancer from talking to me. Diseases like the flu, COVID, and norovirus that spread to other people are not examples of lifestyle diseases.

Listening for Learning 1.2–Anti-Vax Conversation:

Student A: Hey, do you wanna grab something to eat after class?

Student B: I can't. I'm getting my COVID shot this afternoon.

Student A: Why? COVID is just a hoax. I wouldn't want all that poison in my body.

Student B: You know my cousin was hospitalized with COVID in 2021, right? He almost died.

Student A: No, he didn't.

Student B: I'm sorry?

Student A: It was probably just a cold or the flu. I doubt it was even that serious.

Student B: I don't think we can be friends anymore.

4. The Bright Idea

- a. Since there hasn't been too much of a focus on writing in our program, I decided to incorporate some writing exercises that allowed the students to be a little creative and draw on vocabulary from the text. For each module, I have created assignments for the students to write conversations between, for example, a doctor and a patient for the Health and Medicine module or a zookeeper and a guest at the zoo for the Zoology module. Here is an example of the checklist the students must have completed for the conversation they needed to write for the Health and Medicine Module

Listening for Learning 1–Checklist and Vocabulary

We are going to write a conversation between a patient and their doctor using key vocabulary from the overall Health and Medicine Module. You will work on this project together with a partner or small group. Look at the following checklist to see what items you will need to include.

<input type="checkbox"/>	Use at least 5 vocabulary words from the module
<input type="checkbox"/>	The conversation must last at least a minute. The conversation can be longer than a minute
<input type="checkbox"/>	One or two diseases or ailments that the patient could be suffering from
<input type="checkbox"/>	A greeting between the patient and the doctor
<input type="checkbox"/>	The patient listing symptoms they are suffering from
<input type="checkbox"/>	The doctor asking at least two follow-up questions about the patient’s conditions
<input type="checkbox"/>	The doctor giving a list of possible diseases
<input type="checkbox"/>	The doctor giving the patient advice
<input type="checkbox"/>	The doctor giving information about treatments, medication, and/or tests
<input type="checkbox"/>	The patient scheduling a follow-up appointment

You may choose some of these vocabulary words to include in the conversation. You may need to change the verb tense or noun forms. In the blank squares, please write 5 other vocabulary words from the module that you could use to write the conversation.

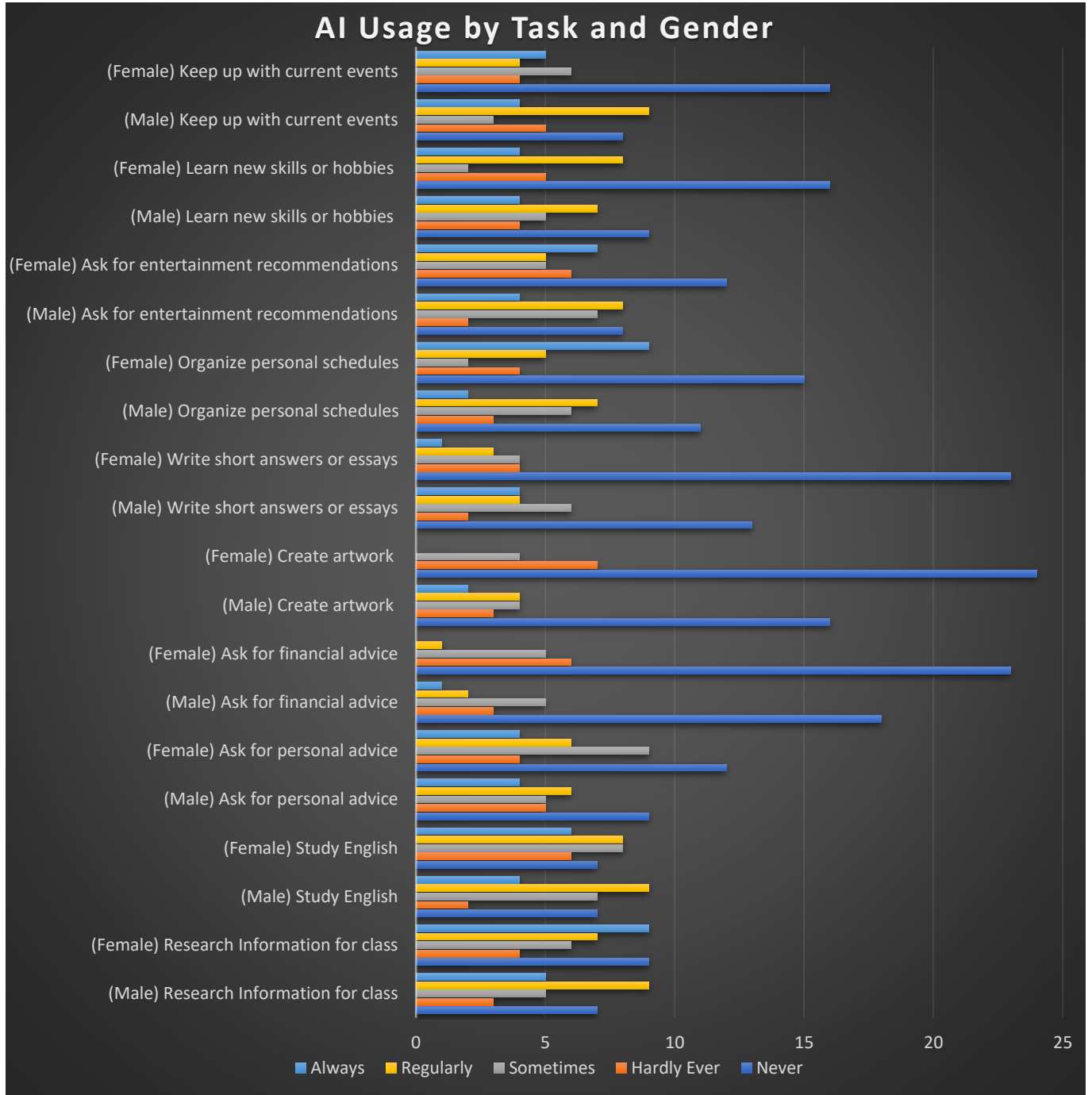
to take (some medicine) / (a pill/tablet)	to apply ointment	side effect	symptom	diet
exercise	perspective	to focus	immune system	condition
habit	lifestyle	contagious	non-communicable	anxiety

- b. But before getting into the implementation, I had to see what my current students’ digital literacy skills were and how often they actually use ChatGPT. I surveyed 64 first-year students, who ranged in English fluency from B1-C1, on their digital literacy skills. The survey was written in both English and Japanese, and asked the students to rate how comfortable they are using different devices and how often they use the internet for certain things. The one section I will focus on is their responses related to AI usage. First, let’s look at their overall responses:

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation
Research information for class / 授業に必要な情報を調べる	64	1	5	3.08	1.505
Study English / 英語を勉強する	64	1	5	3.02	1.386
Ask for personal advice / 個人的なアドバイスを求める	64	1	5	2.64	1.429
Ask for financial advice / 財務アドバイスを求める	64	1	5	1.66	1.011
Create artwork / アート作品を作成する	64	1	5	1.72	1.105
Write short answers or essays / 短い回答やエッセイを書く	64	1	5	2.05	1.374
Organize personal schedules / 個人のスケジュールを整理する	64	1	5	2.61	1.580
Ask for entertainment recommendations / エンターテイメントのおすすめ（映画、音楽など）を求める	64	1	5	2.80	1.503
Learn new skills or hobbies / 新しいスキルや趣味を学ぶ	64	1	5	2.56	1.511

Keep up with current events / 最新のニュースに追いつく	64	1	5	2.59	1.509
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c. Now, let's break it down a little more to see what their responses look like when separated by gender.



- d. So, we can see that there is a wide variety of AI usage, from students who never use it for any tasks to students who use it for many different things. But just because many of the students use AI for different tasks, that doesn't mean they know how to use it well.
5. This brings me back to the assignment. The students are required to write a conversation related to the module together with a small group. The students can research the topic beforehand and take notes, but after they finish taking notes, they can no longer use their phones or computers. They have to use their module booklets and notes from the module to write the conversations.

Listening for Learning 1–Research

Together with your partner or small group, research possible diseases that the patient may be suffering from.

1. Choose three diseases/medical conditions you would like to research.

a. _____

b. _____

c. _____

2. Write down some common symptoms for the first disease.

a. _____

b. _____

c. _____

3. Write down some common treatments for the first disease.

a. _____

b. _____

c. _____

6. Once they finish writing their conversation, I have them think about how they would use ChatGPT to help them edit the conversation to make it more natural or to include English expressions. Then, they write the prompt on a piece of paper. At this point, they should not

type anything. This task **should** help them think about how to formulate a prompt and what outcome they want ChatGPT to help them with. I put emphasis on **should**, but so far, reality hasn't matched my vision on this point. Here is a quick example of one of the group's prompts:

How do you express “お大事にしてください”in English?

How do you express”検査してください”in English?

We want you to express natural conversation between doctor and patient in the exam-room.

How do you express to take an appointment in the hospital in English?

7. So far, the biggest difficulty has been getting the students to understand that talking to ChatGPT is a process. They can't just throw words at ChatGPT and expect it to know what they want. Even though a majority of the students had some kind of experience using generative AI, they had difficulties with handwriting a prompt. This could be because my own explanation...my own prompt to them... was severely lacking. It could be that the students didn't have enough experience using ChatGPT to help them edit something in English, so they didn't know what kinds of prompts they should write. However, some of the groups did produce a more comprehensive prompt after some guidance.

- a. Before:

- 1 differences between Influenza A and B

- 2 symptoms of influenza

- 3 what kind of treatment do we used for influenza

- 4 how long does it take to cure for influenza

- 5 do influenza kill the people

- b. After:

Listening for Learning I—AI Assistance (Paper)

Now, we are going to use ChatGPT to help edit your conversation. You will need to think of a prompt you will give to ChatGPT to ask it to make your conversation more natural. Together with your partner, write down a prompt of what you would like ChatGPT to do for the conversation, what changes it should make, and what new information you would like it to include.

① What is difference between of Influenza A and Influenza B?

② Symptoms of Influenza?

③ What kind of treatment do we need for Influenza?

④ How long does it take to cure for Influenza?

⑤ Do Influenza kill the people?

I need you to remember these five questions, and I will send 's conversation. You should fix the conversation by I gave to you.

I will put the conversation below'

c. ChatGPT Result:

Doctor: Hey, _____. Good morning.

Patient: Good morning, Doctor. How are you?

Doctor: I'm good. Long time no see. What happened to you?

Patient: I'm feeling sick.

Doctor: Oh no. What's wrong?

Patient: I got a fever last night, and my body temperature keeps getting higher.

Doctor: So what's your body temperature?

Patient: Last night it was 37.8°C, and before I left home, it was 38.7°C.

Doctor: Wow, that's quite high! Do you have any other symptoms?

Patient: Yes, my nose is running, and I have a headache.

Doctor: It sounds like you might have the flu. Let me check.

Patient: Oh really? Sure.

Checking

Doctor: My prediction was right. You have Influenza A.

Patient: Oh really? What should I do now?

Doctor: Don't worry. I'll give you some medicine, and you'll be okay. Also, please eat healthy and hot meals.

Patient: Thank you so much for your advice. I'll do as you said.

Doctor: Here are your medicines. This will help and may even prevent the virus from spreading to others.

Patient: Thank you so much, Doctor. I think you saved my life!

Doctor: You're welcome.

d. Before:

Doctor(Ren): Hi, Mr. Kobayashi, how may I assist you today?

Patient(Kobayashi): Hi, Dr Ren, I've been experiencing terrible coughing since 2 weeks ago. I've taken some medicines to relieve coughing, however, it didn't help me.

Doctor: I see. Are there any other symptoms except for coughing?

Patient:Yes, in addition to that, I also have a throbbing headache and high fever. It's totally similar to common coughing symptoms but heavier than that.

Doctor: I'm sorry to hear that. Do you have pain in your body?

Patient:I have two strong pains in my lungs and throat.

Doctor:That's definitely pneumonia. Sometimes, it could come from common coughing.

Patient:Oh, that's bad news for me. Do I need any treatments in a hospital?

Doctor: It depends on the degree of symptoms. In your case, you don't need to take treatments here. Instead, I will give you some prescriptions. You should take it three times a day, like after breakfast, lunch and dinner. You definitely will be tired and sleepy after taking the prescription as a side effect. Also, keep it in mind to stay healthy and take vitamin C. It will help you to recover your immune system. If you have any problems in the following days, please let me know.

e. Prompt:

I want you to make this sentence like a real native speaker's conversation (more natural)

f. After:

Doctor: Hey there, Mr. Kobayashi, how can I help you today?

Patient: Hi, Dr. Ren. I've been dealing with this awful cough for the past couple of weeks. Tried some meds, but no luck.

Doctor: Got it. Besides the cough, are there any other symptoms bothering you?

Patient: Yeah, along with the cough, I've got this pounding headache and a high fever. Feels like your run-of-the-mill cough, just way worse.

Doctor: I'm sorry to hear that. Any body aches?

Patient: Yeah, sharp pains in my lungs and throat.

Doctor: Sounds like pneumonia. Sometimes it starts off as a regular cough.

Patient: Oh, not what I wanted to hear. Do I need to go to the hospital?

Doctor: Depends on how severe your symptoms are. In your case, no need for hospital treatment. I'll prescribe you some meds instead. Take them three times a day, after meals. They might make you feel tired and sleepy as a side effect. Also, remember to stay healthy and load up on vitamin C. It'll help boost your immune system. If anything comes up in the next few days, just give me a shout.

g. Before:

Dr.Pole:Hello. What is wrong Today ?

Patient.JP:Hi Dr. My stomach is killing me today.

Pole:What have you been eating recently days?How about your pain?

JP:Anh.. I ate Sushi two days ago. it is Medium pain.

Pole: I guess that's correct. It's abdominal poison.

Pole:If you eat something raw food, for example fish,meat,etc... you should take care.

JP: OK. All right. I'll take care.

Pole: Your treatment is medication and hydration.

Pole:You should take medicine after every diet and drink half a bottle of water every hour instead. Pole:

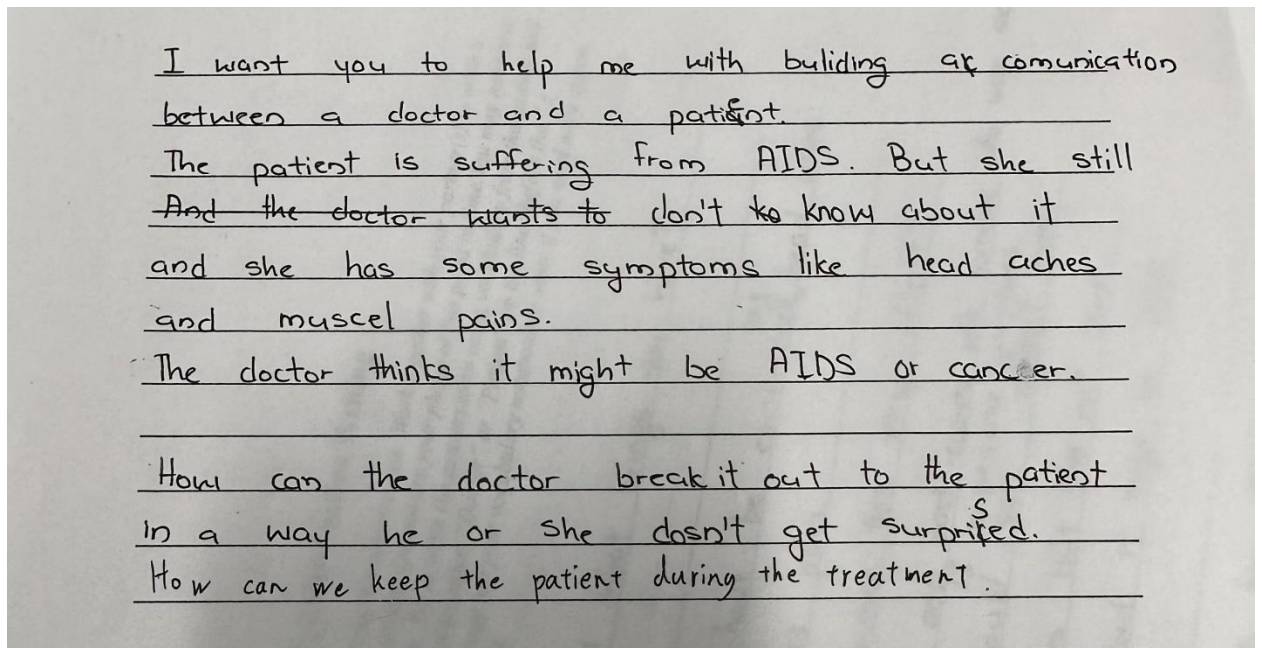
Next time,I wanna check your condition. Please come To next week.

JP:OK. I'll go on Tuesday, See you next.

h. After:

Dr. Pole: Hello. What seems to be the problem today?
Patient JP: Hi, Dr. My stomach is killing me today.
Dr. Pole: What have you been eating recently? How would you describe your pain?
Patient JP: Uh, I ate sushi two days ago. It's a medium pain.
Dr. Pole: I see. It sounds like you might have food poisoning.
Dr. Pole: If you eat raw food, such as fish or meat, you should be cautious.
Patient JP: OK. I'll be more careful.
Dr. Pole: For treatment, you need medication and hydration.
Dr. Pole: Take the medicine after each meal and drink half a bottle of water every hour.
Dr. Pole: I want to check your condition next week. Please come back then.
Patient JP: OK. I'll come on Tuesday. See you next time.

8. Now, some of the students did take a more creative approach to this assignment. This group decided to research AIDS before realizing they would need to write a conversation with a doctor diagnosing a patient with AIDS. They took this assignment seriously, as they knew it was a serious topic and a devastating diagnosis. This group of students decided to ask ChatGPT what the best way to break the news to a patient would be.
 - a. Prompt:



I want you to help me with building a communication between a doctor and a patient.
The patient is suffering from AIDS. But she still ~~And the doctor wants to~~ don't know about it and she has some symptoms like head aches and muscle pains.
The doctor thinks it might be AIDS or cancer.

How can the doctor break it out to the patient in a way he or she doesn't get surprised.
How can we keep the patient during the treatment.

9. This project is still in the early stages as far as student output goes. What I've learned so far is that, even though students are using ChatGPT for a variety of things, they don't know the most effective ways to communicate with ChatGPT for studying purposes. They either want ChatGPT to directly translate something for them or provide them with information without asking it to break it down into accessible pieces for them. For the first conversation writing task, I provided very little guidance to them as far as the conversation writing and prompt writing went. I wanted to see what kind of prompts they would give to ChatGPT without

interference. It appears that prompt writing is not a skill they have strongly developed despite using ChatGPT for a variety of tasks. I will continue to monitor the students and their prompt writing abilities for the rest of this year, and I hope I can provide more substantial results at next year's JALTCALL conference. Thank you all for your time.