

Increasing practice time for university presentation class students by implementing large language models (LLM)

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Abstract

This paper is to act as a record of how a large language model (LLM), specifically Chat GPT (Generative Pre-trained Transformer), can be implemented into a presentation class to assist in creating a more efficient and fruitful course. The current system as a whole cannot process at the speeds that LLMs will change the field of education at all levels. There is a new stage being set and if universities, especially private ones, don't keep up with these changes society will have a major paradigm shift away from tertiary education. I have been teaching university presentation classes for over 15 years and have always been looking for ways to increase students' active participation and performance of speaking activities. While active learning and project based learning (PBL) techniques are very useful and have definitely created a dent in how students learn, there are still specific steps in the classroom that keep students from increasing how many presentations they can write and perform in one semester. What I have found is that if students learn how to prompt LLMs and add data sets to fine tune the LLMs, they can utilize the models in a highly personalized way. This can all be done while generating presentations that reflect their thoughts, but will also increase valuable practice time. There are many caveats to this process that must be given special attention and many assumptions that need to be dispelled. If performed properly, this process can offer a win/win for both students and teachers.

Keywords: large language model (LLM), ChatGPT, artificial intelligence (AI), active learning

Introduction

The speed in which ChatGPT and other AI language models are progressing may make it seem too early for educators to try and implement specific usages in higher learning. The founder of Khan's Academy¹, Sal Khan has stated that ChatGPT could mean that every child in the world could have access to a private 24 hour a day tutor. While it is no secret that originally the inten-

tions for OpenAI to make ChatGPT open source, was bought out by Microsoft which also happens to have stakes in Khan's academy as well doesn't make Sal Khan's assessment incorrect. Although it may be biased in some ways, anyone who knows Sal Khan's history knows how seriously he takes children's education and their access to it. There are voices on the other side of the spectrum who say ChatGPT could be the downfall of learning in general. Who is to say which opinion is true? The most likely answer is both are, but only in increments. As an educator who has watched how students learn, I know that students who do well will do better with a new tool like Chat GPT and the lower level students will most likely rely on it too much. This is just a fact. The effects of the internet have been similar over the years. Those who use it correctly have increased their learning curves greatly, while those who only use it to look up confirmation biased theories have gotten worse. This can be seen in the general knowledge of the younger generation. A favorite thing for many American Youtubers to do is to ask young people simple questions and see what they know. There are students who don't know how many seasons there are or weren't able to name three countries other than the United States. At the same time, many could name all the Kardashian sisters and other popular SNS tropes that have little to no knowledge value. Of course these are extremes, but it shows the negative impact of over-access to information. When dissected, this has more to do with implementation of this information access rather than its existence.

When younger people are basically marketed away from useful information, there is an overall effect of flattening out the middle of the bell curve of general knowledge making the lower end lower and the higher end rise. The real tragedy is the decrease in the middle. This is where more students are affected and also are more challenging to address with reforms. Theoretically this is what will happen with the increased use of AI but the difference will be how much that middle will flatten out. One way to prevent this from happening is to create a new form of guidelines for university students, so they know whether or not they can use AI in a certain class. This will most likely also come in varying degrees. If the usage of AI is correctly implemented, the nebulous mid-level student could have access to knowledge they could have never gotten on their own. Subsequently pushing the curve to the higher end. I am aware this all sounds overly optimistic,

¹ Khan Academy is an American non-profit online educational organization created by Sal Khan in 2006. Khan Academy has produced over 8000 short video lessons in a wide range of topics. It also creates teaching materials for educators in both STEM subjects, history and more.

but it is better to start high rather than low.

This paper will act as a record of my workflow on the application of ChatGPT in a presentation class I teach at my university. I recently started to apply ChatGPT in class to see if it can assist students to speed up areas of the class giving them more time to practice their presentations which is the actual goal of the class. This paper intends to log the benefits and caveats of using ChatGPT in my class.

The basis to implement new ideas in my presentation class started even before the AI model was released. One example is over the years I have had students ask me to help them perform for a speech contest. In general students who enter speech contests tend to be rather serious about their studies, so this may be a factor in this story. The first time I was asked to help a student with his speech, I met with him after class 6 times and helped him practice. He was a good student and he placed third in the final contest. While I thought that was great, I felt that meeting with him 6 times for 40 minutes each time was not a sustainable plan if I was to be asked by other students. I needed a new approach. Whenever a student asked me to help them with their speech, I asked them to meet me once after class. I then had them record my voice reading what they had written. This way they had a solid example of the correct intonation and how to pronounce the words they have written. I then told them to listen to the recording several times a day until their contest. I told them to always repeat what they were listening to as well as reading the sentences out loud as if they were given their presentation everytime. I would check in on them during our regular class until the contest date. Since I started this method, I have seen 6 students come in 1st or 2nd everytime. The time I spent was not only less but the outcome was actually better than when I spent hours with the student. Most students who are motivated will find ways to get things done, but the question I hope to answer in this paper is whether their presentation skills can be enhanced with less time spent. This is the challenge.

The “Old Way”

I dislike the phrase the “old way”, but with the pace of change that needs to occur emotional attachments may need to be done away with to make way to a new progressive way of learning. When I first started teaching presentation classes, I noticed that it felt more like a writing class. I was spending an hour and a half every few weeks correcting their papers. On average, each pres-

entation class was between 25 to 30 students. This actually isn't such a huge amount of time, but I also had a writing class that had over 50 students. This meant every few weeks I would have 75 to 80 papers to correct. While I was correcting the presentation papers, I was always careful to maintain what the students were saying rather than rewriting what they wrote in perfect English. I was trying to protect their voice. This is an important point for later.

In essence I actually believe presentation classes are as important if not more so than writing classes. The reason for this is that even native speakers can be awful writers, but then again they can be terrible public speakers as well. The goal of public speaking is to grow the confidence to explain to a large group of people the importance of a certain topic. Of course the same could be said about writing, but writing doesn't offer the social aspect that presenting does. The idea of standing in front of people while making eye contact and bolstering interest in a subject is a skill few have, but gaining the ability to do it, even at an average level, is somewhat special. This is why I often put so much effort into polishing this course up to an efficient level so students have the access to the tools needed to improve this particular skill. My goal was always to have students making 5 or 6 presentations a semester rather than only 3.

I did this for several years until a sempai of mine said that she never fully corrected presentations because the goal of the class was presenting and not writing. While this made sense on one level there was a fundamental problem with this formula that I realized after using her idea for several years. Students would take hours to write their presentation and I would correct the big errors or shall I say incoherent speech. Then after I did my quick run through of their work, they would start practicing for their presentation which would take place the following week. After using this method for some time I started to feel a fundamental problem. The problem was they were repeating their presentation many times creating a memory bank of incorrect and unnatural English. Repetition is key to learning a language, but what you repeat is the most important. It is kind of like eating. You are what you eat. If a student is repeating incorrect English, then they are solidifying a path to broken English. Broken English can be hard to correct in later years.

At first I thought the problem lies in the correcting and the practice portion of this class, but recently I realize the writing portion is also the biggest time bandit. The amount of time they take to write their presentation is the most time consuming even though it is not the goal of the class.

There are times that we would use 3 or 4 classes throughout the semester for them to just write their work out. I would do this in class so I could observe their progress and directly answer any questions they have. Most students never finished during the class and had to complete their work at home. This is when I had an idea to limit their writing time by supplying them with a pre-written famous or topic related speech. This also presented multiple problems. One problem was the words were sometimes written so that students didn't know what they were reading. Since they were all reading different pre-written speeches it was difficult to go over all the meanings in class. I also tried having students choose to read one of three speeches, to make it easier to explain the contents to the whole class. This ended up with me listening to the same three speeches up to 10 times each. That number could double if I had two presentation classes. I don't think the students appreciated it either. All of this trial and error led me to identify four stages of the class: writing, checking, practicing and of course performing. I have never given up trying to make this class more beneficial to students while balancing my own time and effort. The identification of the stages is an important piece to remember through this paper.

The onset of forced online teaching during the pandemic gave me the knowledge to understand document sharing as well as plagiarism checking all in one package. While I have never been one to shy away from technology, I have always looked at its application differently when it came to teaching. I observed how my senpai taught and thought that would be the most acceptable way to proceed in my job. Looking back on this, even though older teachers have a strong knowledge base, I realized they are less likely to implement new technologically based methods. When I started to see how efficient document sharing made my communications with students much more fluid, my imagination started to take hold of the situation rapidly. I started having students who finished their presentations by a certain day before their presentation day submit their paper to me online. Then I would record my voice like I used to do with my speech contestant students years back. Only a few students took advantage of this opportunity. Even the ones who had my voice recorded, didn't actually use it to practice as much as they should. But the ones who did, always did tremendously better with it. It was a small step but it really only helped the students who would have already most likely done well. It was also apparent that the time I spent on this added part of the class took away time outside of the classroom which means it was not a sustainable choice if more students chose to take advantage of it. This is when I started to realize that technology was where I needed to search.

I always had a hatred for translation software. The main reason was that its inaccuracy resembled nothing of human thought. It was irrational and would use “it” to replace a “he/she” pronoun like serial killer from *Silence of the Lambs*. Overall it was teaching students irrational English that would just dig them into a deeper hole of misunderstandings. Whenever I would see a phrase in a student’s writing that looked “translated”, I would just cringe at the damage it was doing. I somewhat banned the use of translation software. The hard part was enforcing such a ban. If a student who really had tried, but all they produced was a word salad, I couldn’t accuse them of using such software. I considered it my dreaded enemy, because it was hard to accuse a student of using translation software without risking hurting their motivation as well. This all said, I never gave up on technology. The search continued.

The Missing Link

When ChatGPT entered the scene, I had no idea the impact it would make. I originally thought it was going to be just another troublesome piece of translation software. I had all intentions to ignore it while being vigilant to whether the students would be using it. This was a very brief moment that was interrupted by a friend who is very well versed in technology and is also a student of studying the Japanese language like myself. He and I have mentioned in the past that our Japanese levels have seemed to plateau as our lives have developed into normal routines with little or no exposure to new situations. We also have very little time to study outside of work due to other obligations. That said, we both still struggled to find the right words sometimes when writing emails or various documents in Japanese. When he contacted me, he described ChatGPT as the missing link that helped him move beyond that plateau. He strongly suggested I try it.

My first impression of actually using the open source ChatGPT 3.0 version was that it was difficult to navigate to the actual chat prompt page. It wasn’t very intuitive to me or user friendly. But once you get to the prompt page the magic starts to happen. The struggles we have sending Japanese emails that actually reflect who we are in our own native language is a major challenge we both have faced. While I am a native English speaker, he is Italian. We have very different jobs. He works for an international tooling company in the international sales department, so his Japanese emails are internal. He was using ChatGPT to translate emails from his native language into Japanese to save time and make them more specific to the task. Here is where a split starts. Both of us realize the translations generated by ChatGPT are not perfect. The grammar will always be very

good, but the actual translation of what we wrote is not always there. What this software does do, it gives us both a base to work with that we can easily correct because we both know Japanese. Unfortunately, for someone who is not bilingual, there may be some dangers in relying on ChatGPT at this stage. At least for now. The most beneficial part is that it would normally take over 30 minutes to write a long Japanese email myself, but only 5 to 10 minutes to write it in English. Presently I write it in English then translate it into ChatGPT and correct the Japanese. This is roughly three times faster. There is another benefit. Writing emails in another language can also be a little more taxing on the brain. This is basically eliminated, while the goal of the action is maintained. While ChatGPT may not be perfect, in many ways the outcome could be labeled as a perfect win/win solution and still developing into much more.

What can be said is that for those who speak two languages, there are often phrases and thoughts we have in our native language which we have difficulty translating. The truth is sometimes these translations don't exist but sometimes they do and we just never recognize it. Once ChatGPT generates the translations, we learn many phrases that we have heard before but have never been able to connect the dots. It truly was acting like a missing link to our studies. At this point the potential of the ChatGPT language model became evident to me. I will admit, I felt many jobs, mine included, would be in certain danger in the near future. This feeling passed as I realized this tool currently enhances teaching jobs rather than replacing them. Although the future is not known. Sadly that is not true for all jobs. Data centers and help centers are already laying off workers in America after several experiments revealed AI Help and Data centers performed 40% better than human run ones. That is a hard pill to swallow for many. Just like robotics in factories and the internet in the workplace replacing workers in the past, AI language models will also create many jobs. These changes made me realize that it would almost be morally wrong for me not to teach students how to use such a system. This feeling has brought me to where I am.

Implementing ChatGPT

Of course the biggest question is how ChatGPT can be implemented into a classroom while being beneficial to both the teacher and the students without removing the validity of the class itself. This is where guidelines need to be clear for all involved. The most important point is the goal of the class. There are many different classes with many different goals, but I can clearly say that the goal of my presentation class is to have students learn the power of speaking in front of

groups of people using natural English about a specific subject in their own words. This is the base I use to implement ChatGPT. Earlier in this paper I identified four stages students need to perform from start to finish to complete their presentation. Once the theme for a specific presentation is made, students then begin writing their presentations in Japanese. This way they can say exactly what they would normally say in their own language. Most students can write a 2 minute presentation in about 30 minutes. If they did it in English, it would take four times that. Then they enter their Japanese presentation into ChatGPT. ChatGPT will instantly translate what they have written. Then it needs to be corrected. This is where I come in. Checking a paper that has been translated by ChatGPT is an easy process and doesn't have the roller coaster of red pen marks needed if it was student generated English. This takes less than one or two minutes. One thing that I found interesting is that ChatGPT will always translate as close to what the student wrote as possible which is something I have always done in the past when I correct student papers. This will sometimes result in strange English or complicated vocabulary which can confuse students. This can be easily fixed with various prompt techniques which I will explain in the next section of this paper.

Now that the paper has been translated and corrected in less than 40 to 50 minutes, the student now has time to start to practice. This has also given me an extra 40 to 50 minutes of free class time. I use this extra time to record my voice reading each of the students' presentations so they have a native speaker's voice to copy for pronunciation and intonation. They have all the tools to perform their presentation. They have a script that is translated from their own words and thoughts. They also have a grammatically correct copy of what they will practice. Finally they have my voice reading what they have written about. It is a very personalized scenario that I could have only dreamt of in the past. It almost seems perfect, but then the reality sets in.

A divide can happen between students who perform at a higher level than those who don't. Some students have never realized the power of practicing to get better at something. This means some students may not put as much of an effort into this specific step as others. On the other hand, students who do use this practice step completely, they perform at a much higher level than they ever did. Plus they can sense that as well. While lower level students tend to fumble through the generated text not understanding what they are saying because they haven't really practiced.

Having been someone who has suffered from a learning disability when I was younger, I have a tendency not to give up on the lower performing students very easily. They need to understand clearly what they need to do. They need to understand the concept of deep work. Deep work was a phrase coined by Cal Newport in a book published in 2016. The basic concept is that when we wish to attain a higher level skill we need to have consistent periods of deep work. This is usually broken down into several time blocks in one day. The compounded effects from deep work are astoundingly necessary to achieve a high level skill. Even the use of a fraction of this concept can deeply change a person's view of practice in general.

One way I try to motivate the lower achievers is to tell them my expectations for the presentations as well as how they can practice to achieve those expectations. I explain to them it is not about hours of practice a day, but rather a conscious 15 to 20 minutes a day until they make their presentation. I tell them to be careful of words they are not confidently pronouncing. I tell them they need to be aware of the powerpoint slides they have created and to always practice with the slides along with the audio I recorded with them. This can all be done on their phones, while actually speaking is preferred, they can even practice it silently on their way to school. Pre-ChatGPT I only scored students mostly on their performance and content. I rarely was strict with grammar and pronunciation. Now with the help of ChatGPT, I know students have the tools to have written perfect grammar and audio to help them with pronunciation, so I am much stricter when grading these points.

I have spoken about this method to other teachers and one suggestion I have gotten was to have the students write the presentation in English and have ChatGPT correct it. This sounds logical if it were in the old style of learning. Actually I thought the same thing and had originally tested it out in class before I did the translation method. I noticed that the presentations were still not as personalized as they are with the translation method. Plus, ChatGPT gets very confused with non-native English correction and the results are not nearly as pure as the directly translated versions. While it creates grammatically correct sentences, the continuity of the presentations feels very rough and discombobulated. This was one reason I started experimenting with the translation method. Even then ChatGPT needs to technically be taught what and how to translate and correct overly complex sentences, so students can have an easier time understanding what they are presenting. This also helps improve retention of the material they are presenting. For students to

advance safely through this step they need to understand how to prompt ChatGPT to give the most efficient answers for them.

Prompting Chat GPT

ChatGPT is classified as generative AI which means that it can remember information discussed earlier in a conversation strand. For example, if I mention I like motorcycles and consider it my hobby, I can then later in that conversation ask ChatGPT what my hobby is and it will remember what I said earlier in that specific strand. The result would be different if I just ask ChatGPT what my hobby is without the previous mentioning of motorcycles. In this case it would generate a fairly long answer, which I will paraphrase. It will say how it protects privacy and that ChatGPT is not allowed to enter private information in a chat. One example I have personally used has been when I was translating from English to Japanese. I would always ask "please translate this into Japanese?" and then add the English that needed to be translated. What I did was create a strand that in the beginning I asked ChatGPT take anything I add to the strand and immediately translate it into Japanese or English depending which language I added. Currently when I use that specific strand there is no need to deal with setting which language is to be translated. It will just remember the first command as long as I use that specific strand.

This function is perfect if a student is creating a presentation on a specific subject or theme. If they select the same conversation strand each time they enter to work on their presentation, ChatGPT will be up to date with what they have already done. The best way to demonstrate this is with an example strand with some test questions. I created a series of example questions to show students the workflow they will need to finish a presentation strand. Although I wouldn't suggest students write their presentation in this style. This is more of an example of how students can use ChatGPT to do basic research as well as use it for note taking on anything they are researching.

The theme I chose was to have ChatGPT explain the city Fukuoka, which is the city our school is located in. My first question was very simple: "*Can you please tell me about Fukuoka, Japan?*". While on the face this seems like a simple question, for students the information they will receive will be too long for them to use. This question generated a 430 word response which contained many words students may have trouble pronouncing. Words such as *vibrant*, *dynamic*

modern amenities, significance, proximity, despite, boasts, and picturesque all appear in the 430 word answer. If students were to read this they may possibly stumble through many of these words as well as others that I have not shown here. Of course students could challenge themselves and start looking up the pronunciation and meanings of these words. I try to prevent students from doing this. I always teach my students that all steps should support the goal of whatever they are doing. This way they don't get distracted away from necessary actions. Just like when students are doing reading practice, many often choose books well beyond their ability because they think they will learn something. This of course is not a problem but it subtracts from the original goal of reading a book for the content inside rather than just the individual words. This is a pitfall that slows students down tremendously.

In the case of ChatGPT giving an answer above their level, I would have the students do a second prompt such as: "*Can you write about Fukuoka, Japan in as close to 200 words as you can while still keeping it simple enough for a 10 year old to understand?*". In this case ChatGPT generated this 130 word answer:

Fukuoka is a big city in Japan on Kyushu Island. People there love to eat yummy Hakata Ramen noodles. The city has an old castle and a pretty park called Ohori Park with a lake. You can also visit Sumiyoshi Shrine, a special place where people go to pray.

Fukuoka is important for trading with other countries in Asia. It has an airport and a subway to move around the city easily. They have fun festivals like Hakata Gion Yamakasa, where big colorful floats go in a parade.

The city is near the sea and mountains, so you can do fun things like hiking and playing on the beach. Fukuoka is a mix of old stories, tasty food, and nature's beauty. It's a cool place to explore and learn about!

This generated passage is clearly simpler than the first. The chosen language is simple and easy to understand. From my experience, students would have no problem presenting this in class. One of the reasons I wouldn't like my students to use this as their own presentation is it doesn't reflect their voice. Plus, there is another problem with this passage. It is only 130 words long.

Whenever I give a presentation assignment, students need to speak for a certain amount of time or they will lose points. They need to have at least over 200 words to fit within the specified time. This can be adjusted. I tested various prompts to get it closer to 200 words. After several tries of using the number 200, I noticed a pattern that ChatGPT would always play it safe and never get over 140 words. That is when I did the only logical thing. I ask it for 300 words in the final generated response hoping that ChatGPT would play it safe and get me closer to the final goal of 200. That is exactly what happened. I asked: “*Can you write about Fukuoka, Japan in as close to 300 words as you can while still keeping it simple enough for a 10 year old to understand?*” At this point I received this 204 word answer:

Fukuoka is a big and exciting city in Japan on an island called Kyushu. It's a mix of old stories and new things. People there really love to eat tasty food, especially a kind of noodle soup called Hakata Ramen. The city has a special old castle and a park with a beautiful lake where you can go for peaceful walks. If you want to make a wish or say a prayer, you can visit Sumiyoshi Shrine, which is a special place.

Fukuoka is like a busy door for trading with other countries in Asia. They have a place called an airport, where big airplanes take people to different places, and a subway that helps everyone get around the city.

The city has exciting parties called festivals, and one of the coolest ones is Hakata Gion Yamakasa. In July, they have a parade with big colorful floats that go through the streets.

Fukuoka is close to the sea and mountains. That means you can have lots of fun doing outdoor things like hiking in the mountains or playing on the beach. The city is a mix of old stories, yummy food, and the beauty of nature. It's a super fun place to visit and learn about!

I will restate that I would not want students to use this method for class. First of all there are several errors, one being that Fukuoka has a castle, which is actually just the ruins of one. Furthermore, I would rather make sure students are aware of the flexibility of LLMs so they do not limit themselves when trying to use them to learn. The text generated above shows us many interesting points. This time it kept the vocabulary easy while still maintaining the number of words

needed to fit the criteria of the assignment. The generated passage also uses phrases to explain possibly difficult to understand vocabulary for a 10 year old. For example: *People there really love to eat tasty food, especially a kind of noodle soup called Hakata Ramen.* Or *If you want to make a wish or say a prayer, you can visit Sumiyoshi Shrine, which is a special place.* Words such as *tasty* are often used for younger people. Also saying that *ramen is a kind of noodle soup*, is a great phrase pattern students can learn to explain possibly misunderstood vocabulary. Finally, calling Sumiyoshi Shrine *a special place* rather than a sacred one is also a way to make it just easier for students to grasp. This comes to an important point. Many students know the vocabulary above with ease. Some might say it is too easy. I would say they are forgetting the goal of the assignment. While this is just an example, it is assisting in the process of moving forward. In previous papers I have written, I have compared ChatGPT to the introduction of the electronic dictionary back in the 90s. Some people used electronic dictionaries to excel forward, while others used it as a crutch. What has been explained here is how students can make the language learning process easier through prompts using ChatGPT. As I said earlier, the problem with using prompts to generate information that students have not written is we may lose their voice in the final report. But using prompts is very useful for brainstorming and other forms of research. But because this way doesn't represent the voice of the student, I would recommend the translation method instead.

The Translation Method

A step that goes beyond the correction of English that students have written themselves, is just to have ChatGPT or other AI Large Language Models (LLM) translate the students' own language into English so they can relate to it. There are studies which suggest the same (Firaina, R., & Sulisworo, D. 2023). One of the problems with the prompting method explained in the earlier section was the students become separated from their own voice. This separation has always been seen mostly as part of the process of learning a language with the goal eventually closing the gap between the person's real voice and the one they have when speaking a second language. The steps I have used in class are to help students close that gap much sooner than could be ever imagined. The most interesting part about this method is that it solves a problem so fundamental to language learning that many never even sought ways to fix it. Instead it has always been considered a major part of the journey to bilingualism.

Instead of having students use prompts from the very beginning which will only give them the

standard answers generated by ChatGPT, they take the time to write out what they want to say in Japanese. In this way when it is translated it is a very original text. One example is when a bilingual university professor writes an academic essay and publishes it in two languages it would be academically dishonest to count that as two separate publications. Even though the effort to translate the paper was made, the fact is the information offered is essentially the same. This being said, a student writing their presentation in Japanese and then having ChatGPT translate it for them should not count as fraudulent writing.

Continuing on, once the presentation has been translated, then students can use the prompt methods from the early section to refine what has been translated into text they can easily read. The truth is the translation from university level Japanese will generate some difficult English vocabulary as well as some unnatural sentence structure. Even with this flaw, the generated text is much closer to what the student wishes to say than if they had written it in English themselves. As I mentioned earlier in this paper, students recognize English that reflects what they are thinking in Japanese much easier. I often help students translate their thoughts. Students have told me that the sentences I tell them are often the easiest to remember for them. This is most likely because that English reflects their thoughts in a native English sentence rather than a broken sentence written by a Japanese student who is directly translating.

There are several examples I tried that I will share here. First I have a Japanese text that was written by one of my students about the 11th SDG goal. It was actually a much longer passage. I only used half of it for research purposes. This passage also included several references that I will not post, because this is only being used as a source to show the process of translating text in ChatGPT. Here is the original Japanese text:

私は sdgs 問題11番の「住み続けられるまちづくりを」についてまとめようと思います。2022年6月16日に発表された「モノクル『世界で最も住みやすい都市』ランキング2022」に、福岡が22位にランクインされました。バランスの良い日本の都市(“The balanced Japanese city”)と評されています。私たちが暮らしている福岡が住み続けやすいということは、逆を言えば福岡の良いところをロールモデルとして発信することで住み続けやすいまちになっていけると思いました。ですから福岡が住みやすい理由を調べてみました。要因は様々ありますが、私も納得した内容として大きく「交通の便が良い」、「ビジネスが盛ん」「物価が安

い」「自然が近くにある」ことです。福岡はコンパクトシティとして知られています。空港が都市部から近く、10分～15分で着きます。また地下鉄がわかりやすく、3本の路線しかありません。地下鉄の路線が少なくても福岡はバスが多いので行きたい目的地に辿り着くことができます。また都市部の中に大濠公園などの自然豊かな場所もありますし、都市部から糸島や百道浜などの海や山も近いです。しかし都市ならではの問題点もあります。

She explicitly explains the most important parts of Fukuoka that she finds interesting or important to the reader or listener. Next I asked ChatGPT if it could translate this text to English. This is the generated response:

I will summarize the SDGs Goal 11, “Sustainable Cities and Communities.” In the “Monocle’s Most Livable Cities 2022” ranking announced on June 16, 2022, Fukuoka ranked 22nd. It is described as a well-balanced Japanese city. Living in Fukuoka, where we reside, being sustainable suggests that by showcasing its strengths, Fukuoka can serve as a role model for creating a more sustainable community. Therefore, I looked into why Fukuoka is considered livable. There are various factors, but the main ones that I agree with are: “good transportation,” “thriving business,” “affordable cost of living,” and “proximity to nature.” Fukuoka is known as a compact city. The airport is close to the urban area and reachable in 10 to 15 minutes. The subway is straightforward with only three lines. Even with fewer subway lines, Fukuoka has a well-connected bus network, allowing easy access to desired destinations. Moreover, within the urban area, there are natural places like Ohori Park, and the sea and mountains, such as Itoshima and Momochi Beach, are also nearby. However, there are also issues typical of urban areas.

While this is a very basic summary of her thoughts it suits our purpose to understand the workflow of this process. As a native speaker, I personally would not write sentences such as this. As we saw in the earlier example, one of the problems that immediately arises is that some of the generated vocabulary is a bit hard for some students. In this case the words *proximity*, *affordable* and *reachable* are not necessarily difficult words which many students may know if they appeared on a test, but when actually using them they may run into problems. Also in the last sentence, “*issues*” was used. While technically correct, it seemed like an awkward choice. Of course, students can challenge themselves to do more, but when doing presentation practice, it is impor-

tant to maintain a certain level of understanding of what and how they are presenting rather than how much high level vocabulary they are using. As we did with our earlier prompts, I asked ChatGPT to make the above passage simple enough for a 10 year old. This is what it generated:

I'm going to talk about something called SDGs Goal 11, which is about making cities good places to live in. Imagine a city named Fukuoka. It's like a puzzle piece that fits well together. People say it's a great place to live. Recently, a list of the best cities to live in came out, and Fukuoka was number 22! Living in Fukuoka can teach other cities how to be good places to live too. Think of Fukuoka like a superhero that shows other cities how to be nice places for people to stay in. I looked into why Fukuoka is so good to live in. Some reasons are: the transportation is easy (like getting around is simple), lots of businesses are doing well (like many shops and companies are there), things don't cost too much (like it's not too expensive), and there are nice natural places nearby (like parks and the ocean and mountains). Fukuoka is a small city that's easy to get around in. The airport is close, and you can get there in just a short time. Even though the subway has only a few lines, there are many buses that can take you where you want to go. Inside the city, there are places with lots of trees and nature, and a big park. And if you want to see the sea or mountains, they are also not far away. But just like how superheroes have some problems to solve, Fukuoka also has some challenges because it's a city...

Very quickly there are several observations to be made. One is that ChatGPT chooses to approach the presentation as a story to spark younger people's interest. Second, the language used has become much simpler. It even uses parentheses after a sentence to explain what was said but in a different way to help with retention. These added parentheses make the passage a little longer than the original which may pose a problem depending on the use. But in general, words in parentheses are not read, so it would not lengthen a presentation.

AI LLM have more potential if they are supplied with data sets that are specific to a field. Such data sets may assist with word choice for language learners. For example, as of 2023, places like [kaggle.com](https://www.kaggle.com/)² offer data sets for specific fields to limit the amount of mistakes found in generated texts and images. In the case of language learning, LLM already has a sophisticated enough algorithm to answer in grammatically correct language, so for the most part data sets are not needed.

Although there is definitely a need for data sets specifically for Japanese learning to speak English. Such a data set may be able to create personalized tutoring and generated texts for students. This is another area that could change the whole paradigm of education.

Using ChatGPT as a Tutor

It may be too early to say this but ChatGPT and other LLMs have the potential to replace language departments in universities. There is already a trend among high school students in Japan to apply to departments that do not focus on language. This is due to the fact that there is a possibility that certain jobs that only use English will dry up or become limited to fewer workers than before. High school students are learning that English ability should enhance other skills rather than being the main one. For example a student who has skills as either a lawyer, engineer or even a media major who also has the ability to communicate in English is very competitive. Another reason why LLM could replace language departments is the ability to converse in certain fields due to the datasets mentioned in the prior section. Let's say a student who wishes to become a lawyer and also wants to learn English for international law will have 24 hour access to AI LLM datasets for legal discussions. This makes for a very competitive environment for actual human language teachers.

Although the total replacement of language departments may be way off in the future, it still is a good opportunity to apply LLM specifically to language learning because of the grammatical accuracy of its generated content. Students will have access to information they would normally hesitate asking to a real teacher for. Let me use a few very simple examples. If a student asks ChatGPT what is the difference between a, an and the, they receive a simple explanation of how to use each one with examples as well. Then if they don't understand something in the answer they can ask for chatGPT to clarify the examples without fear of failure. Furthermore, These conversations can also be immediately translated into Japanese for a lower level student to clarify any gray areas.

The chatbot doesn't care how many times you ask even the simplest or most mundane questions.

² Kaggle is an online community platform for data scientists and machine learning enthusiasts. Kaggle allows users to collaborate with other users, find and publish datasets, use GPU integrated notebooks, and compete with other data scientists to solve data science challenges. (as explained on [datacamp.com](https://www.kaggle.com))

Pronunciation is also a common problem students have. If a student asks for the pronunciation of a long word, like "Massachusetts", they receive an easy to understand generated answer. ChatGPT doesn't offer any audio yet but what a student can do is ask for 10 example sentences using the word in question. This way students have native style examples which keeps them on track to learn new English while using the English they already know. If definitions are too difficult, again students can ask ChatGPT to simplify it even more. In the end if they still don't understand, they can ask for the meaning in Japanese. As a language learner myself, this is like a dream come true to have a personalized tutor who never gets tired. It is only a matter of time where natural sounding voice responses become commonplace. This all said, even though ChatGPT is a very accurate grammatical model, the answers generated should never be relied upon for the information itself. As for generated translations, they could also possibly have major factual errors, so it wouldn't be wise for a non-bilingual person to haphazardly use it. That would be rather irresponsible due to some of the blatant errors which could cause many misunderstandings in a work environment.

Discussion

I have no doubt that the discussion of the implementation of ChatGPT into university curriculum will be heated to extremes on both sides. Some teachers and admins may want to eliminate the use completely. In my opinion, this would not only be arresting the development of the education system but making it even more antiquated than it currently is. Plus, the efforts needed to actually enforce a ban would be astronomical and may be at great financial and time burdens. On the other hand, to have teachers and administrators rely too much on ChatGPT or other AI LLMs would also be devastating. The most responsible action would be to allow students, teachers and administrators to know how AI LLMs can enhance rather than replace their jobs. The middle is often where the answers are often found minus all the convolutions of different explanations supporting either extreme.

As I mentioned earlier, I think that AI LLM could replace certain language teaching jobs in the future. But even before that, administrative jobs will also mostly be reduced by a large percentage due to the repetition of certain jobs. Anyone who is studying AI LLM and other models will know which jobs can be replaced. News articles will often say jobs won't be replaced, but rather the content of the job itself will change and be redefined. I agree with this, but I believe the redefinition

will include a smaller percentage of those doing the job currently. Plus, it may also reduce compensation as well. Knowing these threats to the workforce, I believe introducing ChatGPT to students in a situation where they need to not only use it but in some ways finetune it to their own needs is a crucial skill for their future. It has been said that within the last year and a half Chat GPT has grown from a 4 year old to someone in their mid-20s. The difference is AI LLM will always grow and never die. Knowing this and its possible infinite existence, adding how to use the current AI LLM to a curriculum seems to only benefit the student's future. Even though what we teach them will most likely be obsolete by the time they are in the workforce, they will still have a functional foundation from which to work from.

Conclusion

Some of the main points I hope can be taken away from this paper is the guideline I gave for implementing AI LLM into a presentation class. The purpose being to enhance the time efficiency of the work in the class so students will be able to use the newly allotted time to spend on more necessary tasks. If the way I have suggested in this paper is implemented correctly, students will be able to create a highly personalized English presentation. They will have ample time to practice while having the recording of the teacher's voice to practice with. Plus these steps are most likely performed in less time than earlier course plans have allowed, so the number of presentations per semester should also rise. This efficiency creates a win/win for teachers and for students.

Another suggestion I would make is that schools should create an easy to understand ranking system that could be applied to classes per the teacher's syllabus. The key is for it to be simple. This can be hard, especially within the Japanese system where some administrators prepare themselves for the 100 year storm in everything they write, making everything seem overly thought out. Intelligence is shown through brevity which leads to a viable conclusion. Over-thinking certain processes weighs down those affected by such implementations. They will be more likely to ignore convoluted instructions. If there was a simple ranking system, then teachers could choose a rank from the system and post it on the syllabus for their class making the students know exactly what they are allowed to use AI LLM for. This would give students a clear guide to refer to when they are confused about how to use AI in class without having to always reconfirm with the teacher or administration.

Currently, at the university I teach at, teachers are allowed to use ChatGPT anyway they wish in class. While this sounds like the gift of autonomy to all, it will confuse students if they have to remember how much they are allowed to use AI in all their various classes run by different instructors. Some teachers may be strict but others can be more forgiving depending on the contents of the class in question. The schools are just passing the responsibility on to the teachers to worry about. There is a possibility that over time and the production of many mistakes made by the teachers that such a ranking system may arise from the confusion. But in the opinion of this teacher, I would say the sooner the better.

I believe ranking should be used to have classes fit into a certain guideline so students know how they can or cannot apply ChatGPT or other AI tools to their work without fear of reprimand.

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