

Consistency in Japanese Language Learning Using Generative AI

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Abstract

Learning a new language can indeed be quite challenging for anyone. If your only language is your native one, you might find that picking up a non-English language can be especially tough due to the various languages that have complex grammar and difficult pronunciation. However, no matter how intimidating a language might seem, there are always strategies to maintain your efforts and effectively retain what you've learned. If you want to become fluent in your selected language, consistency is essential, and determination is vital to see favourable results. Regular language study helps strengthen the brain's neural connections between new words and their meanings, which improves memory. Regular practice guarantees ongoing advancement in language learning, fostering an active educational experience and preventing the loss of knowledge that has already been gained. The rise of artificial intelligence (AI) has transformed the process of language acquisition, especially for learners of languages like Japanese. This paper investigates how generative AI contributes to consistency in the learning of the Japanese language. While retaining language skills and maintaining regular practice are essential for mastering any language, the use of generative AI tools can offer customized, engaging, and adaptive learning experiences. By reviewing current literature and emerging trends in the use of AI, this paper emphasizes key approaches to integrating generative AI into Japanese language education and assesses its potential effects on learner outcomes. Generative AI presents substantial opportunities for the future of communication, and tackling the challenges it faces with Japanese is crucial for fostering a truly global linguistic landscape. By understanding the limitations and applying the given recommendations, users can leverage generative AI as a valuable tool for managing Japanese text. As researchers develop AI models specifically designed for the Japanese language, the gap between AI and the intricate nature of Japanese will continue to narrow, supporting improved communication and creativity across multiple languages. There are always strategies to sustain your effort and effectively memorize what you've learned. If your goal is to achieve fluency in the language you've selected, it's essential to be consistent, and persistence is necessary to witness positive outcomes. These tips will assist you in remaining consistent and learning the new language quickly and effortlessly.

Keywords -Japanese, Generative AI, Consistency, Personalized Learning, Adaptive Learning

I.Introduction

Japanese is a language characterized by its unique script, intricate grammatical structures, and rich cultural nuances. For learners, consistency in practice is essential to mastering the language, but traditional learning methods often face challenges such as lack of motivation, difficulty in scheduling regular study sessions, and limited access to native speakers. Generative AI offers promising solutions that can enhance consistency and engagement in language learning. By providing tailored content and interactive experiences, AI can help learners maintain their motivation and practice frequency, resulting in improved language proficiency. Consistency forms the bedrock of effective language learning. Research has shown that regular exposure to language—through reading, writing, speaking, and listening—significantly enhances retention and fluency (Ellis, 2008). In the case of Japanese, the complexities of the writing system (Hiragana, Katakana, and Kanji) require frequent practice to achieve familiarity and competence. Therefore, a consistent approach to learning is crucial for success, as irregular practice can lead to forgetfulness and diminished motivation. Generative AI refers to algorithms that can generate text, images, or other media in a manner that mimics human creativity (G.Dizon, et.al 2021). In language education, generative AI tools can create personalized language exercises, conversation simulations, and culturally relevant content. Notable

examples include language learning apps that utilize chatbots to facilitate speaking practice, AI-based writing assistants that provide instant feedback, and content generators that cater to the learner's proficiency level.

II. Significance of the Study

This research is important for the field of language learning especially Japanese language. The findings may be helpful for the learners to understand the various factors affecting learning Japanese language and also technology assistance is essential to maintain the consistency in language learning.

III. Literature Review

Desi Tzoneva 2024 are consistently working on areas where they need improvement, fostering a sense of accomplishment and sustained interest. Adaptive systems leverage AI to adjust the learning material based on the learner's performance.

Xi Lin et.al (2024) described the benefits of artificial intelligence in education and stated the use of AI for pedagogical and community enhancement.

Chan et.al (2023) stated that Generative AI can create interactive narratives and role-playing scenarios that immerse learners in culturally relevant contexts. These engaging experiences can motivate learners to practice more frequently and develop a habit of studying regularly.

Virtual Learning Environment (VLE)(2020) is a system utilized by educational institutions, as well as universities and colleges, to enable educators to organize their lessons and communicate with students (Sistem Pembelajaran Daring, PEPI Terapkan Virtual Learning Environment, 2020)

Nise Samudra Sasanti, (December 2022) studied various methods to maintain the consistency in Japanese language learning.

IV. Objectives

1. To know the basic characteristics of Japanese language
2. To know the barriers in learning Japanese language
3. To understand the methods available for maintaining consistency for Japanese language
4. To review GenerativeAI technology for Japanese language learning
5. To identify the characteristics of proposed model for learning Japanese language

V. Research Questions

1. What are the features of Japanese language?
2. What are the parameters affecting the Japanese learning language?
3. How to maintain the consistency in Japanese language learning?
4. What are the benefits of GenerativeAI for Japanese language learning?

VI. Characteristics of Japanese Language Learning

Japanese is a non-Western language and a language isolate, it should come as no surprise that it differs greatly from. There aren't many aspects of Japanese that are intrinsically challenging, despite the widespread misconception that it's "the world's most difficult language." With only 15 different consonants and 5 vowels—the majority of which are present in English or have a close approximation—pronunciation is incredibly simple. In contrast, English has about 34 different sounds, depending on the dialect, and many, but not all, of our spelling issues stem from the attempt to fit these sounds into 26 letters. The alternating consonant-vowel-consonant-vowel syllable structure gives the language a quick, steady rhythm similar to that of Italian or Spanish. Although the grammar is intricate, it is rational and methodical. The sentence structure is simple but adaptable. Unlike English, which is a disaster, the language has almost entirely regular verb conjugation and lacks the gender

and number inflections found in most European languages. The biggest challenge for beginners, in my opinion, is understanding how a Japanese sentence is put together. Since most things are simply expressed differently in Japanese, this is the main source of ongoing difficulties. In other words, either way, direct, word-level translation yields subpar, even absurd, results. Because of this, it is especially important that you commit to trying to understand why any given construction means what it does, rather than concentrating solely on memorizing individual sentence patterns, which will fail you in novel situations. Put another way, pay attention to the general grammar first, then the specifics. In this manner, you'll be able to quickly add new constructions to your network of useful knowledge and at least be able to make educated guesses about what they mean. This is essential for success in the majority of other conceptual subjects in addition to being relevant language learning.

VII. Steps to learn Japanese language

Setting clear, attainable objectives, like passing a language test or conversing with a native speaker, is crucial when learning Japanese. By keeping a journal or using language learning applications to log new vocabulary and grammar rules, you can track your progress and celebrate your successes while also identifying areas that require improvement. Learners can get started with the help of a variety of tools and techniques. Immersion is one of the best methods for learning Japanese. You can speed up your language learning by setting up a Japanese immersion environment at home or even by visiting Japan. To create a Japanese immersion environment at home, follow these easy steps:

1. Start by selecting Japanese as the language on your computer, phone, and other gadgets. This will help you acquire new vocabulary and expose you to the language on a daily basis.
2. Your listening and comprehension skills can be enhanced by watching Japanese films or TV series with subtitles. As your skills advance, you can watch with English subtitles and Japanese audio, then switch to Japanese subtitles.
3. As you commute, work out, or do housework, you can enhance your listening skills and become accustomed to the sound and rhythm of Japanese by listening to Japanese music, podcasts, or audiobooks. You can work your way up to more difficult materials by beginning with songs that are easier to pronounce and have a slower tempo.

In today's digital world, where successful communication and cross-cultural understanding are critical for academic, professional, and personal success, language instruction and learning are crucial. (Nise Samudra Sasanti, (December 2022). Being able to communicate clearly, navigate a variety of cultural contexts, and participate in meaningful interactions are all made possible by language proficiency. Language educators have historically served as the main agents of language learning and development in the classroom, teaching students the fundamentals of the language and evaluating their progress through both spoken and written components. However, the introduction of the internet and search engines has changed the face of language learning since it significantly lessens students' dependence on teachers and gives them access to a wealth of knowledge, language resources, and platforms that are tailored to their specific needs. learning needs. The introduction of GenAI programs represents the beginning of yet another paradigm shift in language education and acquisition.

VIII. Barriers in learning Japanese language

Education involves an exchange between a teacher and their students in order to reach specific objectives. Hence, the goal is to reduce barriers from educators and students to ensure smooth learning with various methods.

Foreign language anxiety refers to anxiety related to a specific situation. Foreign language anxiety refers to anxiety related to a specific situation. Foreign language anxiety refers to the stress that students may feel while studying a foreign language. Foreign language anxiety signifies the worry students might have when picking up a new language. Foreign language class

anxiety is quite different. It is another type of anxiety, and not just a collection of other anxieties.

When convictions and actuality collide, anxiety ensues. Fear and worry stemming from individual and social concerns in the process of learning a language have been associated with communication nervousness, social unease, and language learning-specific fears.

This is a significant factor in fueling language anxiety. When beliefs collide with reality, anxiety ensues. Instructor beliefs on language teaching. Instructors who believe their role is to constantly correct students and feel unable to allow them to work in pairs for fear of losing control; those who think the teacher should dominate conversations and teaching tasks, and see their role as similar to a drill sergeant rather than a facilitator might be adding to learner language anxiety.

IX. Materials and Method

The study utilized a qualitative research method with a descriptive approach. The study included around 90 students learning Japanese. IT, such as WhatsApp groups and e-mails, was utilized to distribute or provide questionnaires. Information collected from the completed survey from participants. The list of questions is mentioned in Table 1

Table 1: List of Questions given to students

Sr. No.	Sample Questions
1.	When you Started learning Japanese language?
2.	Which resources do you use?
3.	What are the barriers during learning process?
4.	How much time do you spend for learning?
5.	Do you attend courses consistently?

X. Results and Discussion

In the following section the results of the research will be described by referring to the available tables show the barriers in the Japanese language learning:

Table 2: Foreign Language Anxiety

Answer	Responses	Percentage (%)
Yes	75	84%
No	15	16%

Based on the above table, 75% respondents agree about foreign language anxiety which is the biggest barrier for learning Japanese language.

Table3: Time Management

Answer	Responses	Percentage (%)
Yes	85	94%
No	05	6%

Most of the learners are not able to manage the time in an adequate manner which may lead to distract the learner from learning.

Table4: Availability of Experts

Answer	Responses	Percentage (%)
Yes	80	89%
No	10	11%

According to above table, the experts are not available easily. Without the guidance of expert it is difficult to take the lessons of Japanese language.

Table5: Technology Issues

Answer	Responses	Percentage (%)
Yes	70	78%
No	20	22%

Technology issues like network problems, selection of adequate online resource may cause difficulties to get the language details.

Table6: Unclear Focus

Answer	Responses	Percentage (%)
Yes	40	45%
No	50	55%

It is observed that most of the time focus of a learner is not clear about learning the Japanese language. Learner is not having assurance about the selection of the language.

XI. Role of GenerativeAI for learning Japanese language

India's education system has experienced a digital revolution in recent years, with technology being essential to improving educational opportunities and increasing access. Generative AI holds promise for transforming teaching and learning approaches, customizing education, and meeting the various needs of Indian students. The capacity of generative AI in education to customize student learning experiences is one of its main benefits. Generative AI algorithms can produce individualized feedback, adaptive learning pathways, and tailored instructional materials by examining each learner's unique learning preferences, styles, and skills. With this method, teachers in India may meet the individual needs of every student, encouraging motivation, engagement, and academic success. Text, photos, videos, and interactive simulations are just a few of the educational materials that generative AI algorithms may produce in a variety of subjects and fields. Generative AI can be extremely helpful in creating curricular materials, textbooks, and digital learning tools that are suited to the local context and curriculum standards in India, where access to high-quality educational resources may be restricted in some areas. In addition to improving educational quality, this encourages equity and inclusivity in the distribution of learning materials.

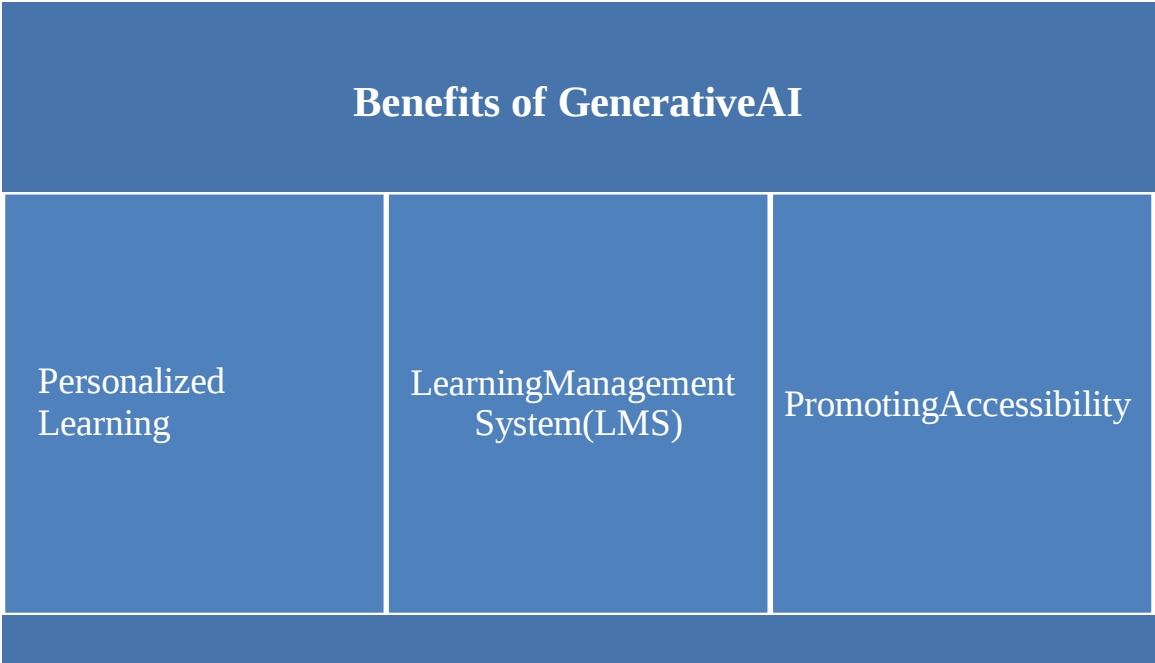


Figure1.Role of GenerativeAI For Learning

By offering materials and tools for professional development, classroom management, and lesson planning, generative AI can also help Indian educators. AI-powered virtual assistants, for instance, can assist teachers in more effectively planning lessons, setting up classroom activities, and evaluating students' progress. Furthermore, generative AI can evaluate instructional strategies and offer teachers ideas for ongoing development and advancement.

Making sure that education is inclusive and accessible is crucial in a multicultural nation like India, where students have different backgrounds and special learning requirements. By offering solutions for kids that struggle with learning, language barriers, or disabilities generative AI can help close the gap. AI-generated information, for example, can be modified to suit many learning styles, including tactile, visual, and auditory, increasing accessibility and inclusivity for all students. Generative AI holds the potential to revolutionize education in India through customizing learning experiences, generating adaptive educational materials, aiding educators, and enhancing inclusiveness and accessibility. It is important to focus on ethical concerns, protect student data privacy, and guarantee fair access to educational opportunities for all learners in India. By responsibly adopting innovation, we can fully harness the potential of Generative AI to influence the future of education and support the upcoming generation of students. The development of LLM, especially Japanese LLM, requires a much larger work for AI's more accurate translation, and requires more accurate and correct conclusions. There are several legislative

measures taken in the direction of the industry's "software" regulation, but it is unknown how to regulate the generated AI in Japan. Given the current competition between the US and the EU, it is clear that Japan needs AI for Japanese translation if it is to maintain its status as a high-tech nation.

XII. Content generation using GenerativeAI

Content generation is one of the finest characteristics of GenerativeAI technology. In the proposed model, a learner will create his or her profile. Based on the skills, lessons will be suggested by the model in text, audio or video format. The model will provide the relevant vocabulary or other informative material depending on the interests of a learner. With the help of this attribute learners' engagement will be achieved in an adequate manner. The model will evaluate the performance by continuously monitoring the activities for the improvement. For facilitating collaborative learning, chatbot will establish the communication to provide solutions for learners. To develop a model Python programming language will be used. Sample code is given as follows:

```
from chatterbot. Trainers import ListTrainer

chatbot = ChatBot("Chatpot")

trainer = ListTrainer(chatbot)

trainer.train([

    "Hello",

    "Plz ask the questions",])

trainer.train([

    "What is the level of Expertise of Japanese language?",

    "Beginner",])
```

XIII. Conclusion

Learning the foreign language is essential activity for better career prospects. Maintaining the consistency is difficult for the learners. Learners must accept the challenges you're facing and accept them with patience and dignity. It is necessary to understand the problems in learning process and work accordingly. Learners can take advantages of various technologies such as generativeAI to get the benefits. Generative AI presents an exciting frontier in the realm of Japanese language learning, particularly concerning the need for consistency. By offering personalized, engaging, and adaptive experiences, these tools can facilitate regular practice, enhance motivation, and ultimately improve language proficiency. Future advancements in generative AI could further bridge the gap between technology and human interaction, empowering learners to achieve their language learning goals more effectively. As language educators and learners harness the potential of AI, it is crucial to remain mindful of the accompanying challenges to unlock the full benefits of this innovative approach.

References

- [1] Xi Lin, Roy Y. Chan, Shyam Sharma, Krishna Bista, 'ChatGPT and Global Higher Education: Using Artificial Intelligence in Teaching and Learning', (2024), pp-1, <https://press.starscholars.org/press/catalog/book/52>
- [2] Atlas, S. (2023). 'ChatGPT for higher education and professional development: A guide to conversational AI.', https://digitalcommons.uri.edu/cba_facpubs/548
- [3] Chan, C. K. Y., & Tsi, L. H. Y. (2023), 'The AI Revolution in Education: Will AI Replace or Assist Teachers in Higher Education?' [Preprint]. arXiv. <https://arxiv.org/abs/2305.01185>

- [4] Desi Tzoneva. Unlocking the Power of LAM and LLM: 'A Journey Through Asian Perspectives' (2024)
- [5] G. Dizon, J. Gayed, 'Examining the impact of Grammarly on the quality of mobile L2 writing', The JALT CALL Journal, 17 (2) (2021), pp. 74-92
- [6] Ellis, R. (2008), 'The study of second language acquisition', Oxford University Press
- [7] Nise Samudra Sasanti, (December 2022), 'Japanese Language Learning Consistency in the Digital Era', Jurnal Lingua Idea 13(2), DOI:10.20884/1.jli.2022.13.2.6325
- [8] Sistem Pembelajaran Daring, PEPI Terapkan, 'Virtual Learning Environment' (2020), Politeknik Enjiniring Pertanian Indonesia, <https://pepi.ac.id/berita/sistem-pembelajaran-daring-pepi-terapkan-virtual-learning-environment/>