Enhancing Japanese Reading Comprehension Skills among Students: An Instructional Model Perspective

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Abstract

One of the most important aspects of learning a new language is comprehension, so teachers must promote language comprehensibility by implementing the finest instructional strategies to help students in understanding the target language. Therefore, this research aims to develop an instructional model to enhance Japanese reading comprehension skills among university students. To identify the extent that the teachers employ language comprehensibility practices in Japanese reading comprehension, experimental study was employed. The research methodology was divided into three phases which involved investigating the current problems through contextual study, construct tentative model and implementation. From the input, this study constructed the tentative instruction based on reading comprehension skills model named as CLAS model. Finally, the model was implemented to 36 students. The findings show the students were unable to read long sentences in Japanese due to their lack of knowledge on vocabulary and grammar, as well as the awareness of understanding sentences. Then, the implementation of the CLAS model includes focus, rationale, syntax, social system, support system, and application and effects has been conducted in order to enhance Japanese reading skills among students. The data shows that the score in the experimental groups is more than the control group score. This result indicates that the CLAS model has enhanced the Japanese reading comprehension skills among university students who needs more attention.

Keywords: instructional model, Japanese reading, comprehension skills, university students

1. Introduction

Reading proficiency is one of the key abilities in the teaching and learning of the Japanese language, along with listening, speaking, and writing. The ability to read is a way to learn new things and expand one's knowledge and experiences. Students with strong reading abilities will develop their comprehension abilities and gain knowledge in several subject areas. Also, it can enhance students' spoking and listening abilities in a foreign language, as well as their self-efficacy in problem-solving and performance enhancement.

Since the 1980s, when Japan emerged as a significant economic force and one of the world's most successful nations (Allinson, 2004; Sellek, 2001), the Japanese language has gained popularity in China. Because of Japan's prominent position in the globe, there has been an increase in interest in learning Japanese as it is seen as a valuable skill for job advancement (Endo, 2011). Additionally, the Japanese language was regarded as practical and gained popularity as a popular foreign language to study, many universities in China have the Japanese language majors and the students majoring in foreign languages like to choose Japanese as a second foreign language.

In China, students in foreign language schools or universities are required to take a second foreign language course. Those majoring in English Language Study took Japanese as a second foreign language in the foreign language school, whereas those majoring in Business English chose French. With 200 contact hours, the student studies Japanese throughout the course of four terms (two academic years). Beginning Japanese language learners should place a higher priority on reading comprehension than on other language skills. Excellent academic performance increases a student's chances of getting a decent job by helping them pass their final exams for a bachelor's degree in

English as well as their admission exams for master's programs in the subject.

Although the intention to learn Japanese among Chinese university students was quite high, the results revealed a lack of linguistic expertise, comprehension abilities, general knowledge, and a favorable attitude toward reading. It includes fundamental abilities like sentence construction, schema knowledge (Carrell, 1987), comprehension abilities (Banda, 2009), text types and reading strategies (Floyd & Carrell, 1987), interest in reading (Azikiwe, 2007), a bad attitude, refusing to read (Satija, 2002), and not paying attention to text (Banda, 2009). Also, the traditional approach to teaching reading comprehension does not emphasize active learning but rather the acquisition of grammar.

According to research, Chinese students face difficulties in comprehending Japanese texts due to differences in the two languages' structures and writing systems. Japanese writing system, which includes three scripts (kanji, hiragana, and katakana) and a mix of Chinese characters, compounds, and words of native Japanese origin, poses unique challenges to Chinese readers. One study conducted by Zhang et al. (2020) investigated Chinese students' reading comprehension ability of Japanese texts. The results showed that Chinese students' comprehension of Japanese texts was significantly lower than their comprehension of Chinese and English texts. The researchers suggested that the Chinese language's lack of a phonetic alphabet and its reliance on homophones might be the reason for the difficulty in learning Japanese reading comprehension.

Another study conducted by Qian et al., (2018) analyzed the differences in reading comprehension strategies used by Chinese and Japanese students when reading Japanese texts. The findings indicated that Chinese students used less efficient reading strategies and had less experience in reading Japanese texts than Japanese students. The researchers suggested that Chinese students' lack of exposure to Japanese language and culture could be the reason for the difference.

In addition, the students are not familiar with the grammar and structure of sentences that are quite different from their level. The explanations of some grammar in the textbook are difficult for students to self-study. For instance, the second-year and third-year students majoring in English in the university have learned a lot of effective English reading strategies but they are unable to apply the strategy in Japanese text forms. In conclusion, Chinese students face difficulties in comprehending Japanese texts due to differences in the two languages' structures and writing systems. More research is needed to identify effective strategies for Chinese students to improve their Japanese reading comprehension skills. Thus, university students require the new instructional paradigm for Japanese reading comprehension. Derived from the problem in reading comprehension skills for Japanese language, this study aims to investigate the current problems in Japanese reading comprehension. Furthermore, the study will develop a new instructional model based on CLAS model to enhance Japanese reading comprehension skills and test its applicability to the context of Japanese language.

2. Literature Review

2.1 Japanese Language

Japanese is an agglutinative language with simple phonotactics, a pure vowel system, phonemic vowel and consonant length, and a pitch-accent that is lexically relevant. Word order is typically subject-object-verb, with particles indicating grammatical function, and sentence structure is topic-comment. Sentence-ending particles are employed to convey emotive or dramatic emphasis, as well as to pose queries. There is no grammatical number or gender for nouns, and there are no articles. Verbs are conjugated for tense and voice, but not for person. Adjectives in Japanese are conjugated as well. Japanese honorifics use verb forms and vocabulary to emphasise the relative status of the speaker, listener, and people referenced.

Although Japanese has no genetic tie with Chinese (Deal, 2002), it uses Chinese letters, or kanji, extensively in its writing system, and a considerable percentage of its vocabulary is derived from Chinese. In addition to kanji, the Japanese writing system principally employs two syllabic (or moraic) characters, hiragana, and katakana. Hiragana is used to write grammatical morphemes that are tied to Chinese characters (kanji) that are used for content words, whereas katakana is used for foreign words (Aronoff & Rees-Miller, 2003). Latin character is used sparingly, such as for imported acronyms, while the number system mostly employs Arabic numerals alongside traditional Chinese numerals.

2.2 Reading Comprehension

The ability to process literature, understand its meaning, and integrate it with what the reader already knows is referred to as reading comprehension. The level of understanding of a text/message is referred to as reading comprehension. This understanding results from the interaction of the written words and how they elicit information

outside of the text/message (Rayner et al., 2001). Reading comprehension is a multidimensional skill and it is present throughout the arc of human development (Fonseca et al., 2019). Comprehension is a creative process that is dependent on four language skills: phonology, syntax, semantics, and pragmatics.

Knowing the meaning of words, understanding the meaning of a word from its context, following the organisation of a passage and identifying antecedents and references, drawing inferences from a passage about its contents, identifying the main thought of a passage, answering questions answered in a passage, and recognising literary devices or propositional strides are all fundamental skills required in efficient reading comprehension.

The ability of readers to grasp material is determined by their skills and ability to process information. When pupils struggle with word recognition, they use too much of their processing capacity to read individual words, which interferes with their ability to grasp what is read. Reading strategy (Qian et al., 2023; Yang et al., 2022; Maghsoudi, 2022; Filderman et al., 2022) has a strong effect on reading comprehension. There are numerous reading tactics that can be used to improve reading comprehension and inferences, such as expanding one's vocabulary, doing critical text analysis (intertextuality, actual occurrences vs. narrative of events, etc.), and engaging in deep reading. Many factors predict reading comprehension, the order of relative importance of the variables is vocabulary, prior knowledge, motivation, self-efficacy, and reading strategies (Urfali & Ungan, 2023).

According to Seyler (2000), reading is the comprehension of ideas, facts, or feelings that words transmit when put together in the precise form chosen by the writer. To grasp, analyse, and criticise the text, the reader must be able to comprehend it. Reading comprehension is the basis of reading, therefore failure to comprehend the main idea will result in further problems in reading at a higher level (Pongsakorn, 2022). Teaching kids to read entails teaching them how to comprehend and react to what they read, as well as how to read for meaning (Tierney & Readence, 2000).

Rubin (1993) and Burns (1999) defined reading comprehension as the ability to understand what was read, which requires the reader to comprehend the meaning of the texts. As a result, reading teachers required to appreciate the nature of reading comprehension in order to help their pupils comprehend texts and teach reading more efficiently and effectively. Carrell (1987) defined reading comprehension as an interaction process between the reader's prior knowledge and the text.

According to Grabe and Stoller (2002), one of the goals that pushed people to read was comprehension. They also claimed that "reading for general comprehension required very rapid and automatic processing of words, strong skills in forming a general meaning, presentation of main ideas, and efficient coordination of many processes under very limited time constraints" (p.14).

Reading comprehension, according to Lenz (2005), is the process of generating meaning from text. According to Zheng, Cheng, and Klinger (2007), reading comprehension entails much more than readers' responses to text. Pang et al. (2003) describe comprehension as the process of deriving meaning from related text. To summarise, reading comprehension is the automatic processing of words to understand the meaning of the text, to obtain new information, and to blend past knowledge to build the reader's views.

2.3 Instruction Model

The instructional model is the result of teachers developing a repertoire of practises as they interact with students and form environments designed to educate them. Teaching models are really models of learning. Teachers assist students in acquiring knowledge, ideas, skills, values, methods of thinking, and ways of expressing themselves. Teachers educate pupils how to learn as well (Joyce et al., 2003).

The instructional model refers to the plan or model that can be used for instruction; The plan or model that will be a guide for designing instruction which assists learners to attain learning objectives; The plan or model which consists of important procedures or steps of instruction together with teaching methods and techniques; the instructional model can put theories, principles, or approaches into learning condition; and to proof, testing, and acceptance that the plan or model to be used as the plan for instruction to assist learners to attain particular learning objectives is indeed effective (Joyce & Weil, 1986; Chano, 2012).

Models are prescriptive teaching strategies that assist in the achievement of specified instructional goals (Eggen et al., 1979). A teaching model is a description of a learning environment that includes our behaviour as teachers when that model is applied (Joyce, Weil, & Calhoun, 2014). Educational models are unique educational programmes that are built in accordance with the relevant learning theories. It includes a full curricular blueprint for designing instructional materials, lesson preparation, teacher pupil roles, supporting aids, and so on.

Models of teaching are highly effective teaching tactics used to convey a certain topic to students. The nature of the topic, presenting manner, and classroom setting will guide the instructor in deciding which model of teaching to use for teaching the subject. A teaching model is a set of criteria for creating educational activities and surroundings. A teaching model is a plan that can be used to form courses of study, construct instructional materials, and direct instruction (Passi, Singh, & Sansanwal, 1991).

A teaching model is a collection of interconnected components organised in a logical sequence that provides guidance for achieving a given goal. It aids in the design of instructional activities and environmental amenities, as well as their implementation and achievement of the specified objectives. Therefore, instructional model is plan for instruction, a guide for designing instruction, is important procedures of instruction. In general, the instructional model can be divided into traditional and modern approach.

The Grammar-Translation technique is a traditional educational model in foreign language study. This method, which dates back to the nineteenth century, is founded on the premise that language instruction should concentrate on grammar rules and text translation. Students learn the grammar rules of the language and practise translating sentences from the target language to their native language and vice versa with this approach. The focus is on written language and the mastery of grammar and vocabulary. Another traditional instructional model is the Audio-Lingual method. This approach was developed in the mid-20th century and is based on the idea that language learning should focus on developing oral skills and habit formation. In this method, students practice dialogues and drill grammar and vocabulary through repetition.

The Direct Method is another traditional instructional model. This approach emphasizes the use of the target language in the classroom, and teachers communicate only in the target language. Students learn through immersion, and there is a focus on developing listening and speaking skills. These traditional models have been criticized for being too focused on the mechanics of the language and not emphasizing communicative competence. However, they have influenced the development of modern language teaching methods, and many elements of these models can still be seen in contemporary language teaching approaches.

While, the CLAS instructional model is a modern approach to foreign language teaching that emphasizes communication and proficiency-based instruction. CLAS stands for Communicative Language Approach with Standards. In the CLAS model, the focus is on developing students' ability to communicate in the target language in real-world contexts. The approach involves task-based instruction, where students are given authentic and meaningful tasks to complete using the language they are learning.

Table 1. Comprehension Skills Model (CLAS model)

Focus	Rational	Syntax	Social system	Support system	Application and effects
To enhance Japanese reading comprehension skill of university students	Peaceful activities	Step 1 Concentration	T: Guider S: Meditator	Peaceful environment Slide, multimedia	Habit of concentration
	Natural social process	Step 2 Learning new knowledge	T: Instructor S: Follower	Well-organized materials. Multimedia Learning software	Conceptual structure
	The interaction environment	Step 3 Application	S: Follower T: Encourager	Small-scale group discussions	Reading strategy of sentence
	Learning environment	Step 4 Summary and assignment	T: Reminder S: Cooperator	Peer cooperation Variety of media resources	Interesting of reading.

The CLAS model also incorporates the use of authentic materials such as films, videos, and articles to expose students to the target language and culture. In addition, the model includes a strong focus on language proficiency standards to guide instruction and assessment. In the CLAS model, grammar and vocabulary are taught in context,

rather than in isolation, and there is an emphasis on the use of the target language in the classroom. This approach helps students to develop their language skills and the ability to use the language in a variety of real-life situations. Overall, the CLAS instructional model is designed to help students develop both the linguistic and communicative competence necessary for successful language use in the real world.

The tentative reading comprehension skills model (CLAS Model) are summarized as following form, including focus, rational, syntax, social system, and support system. The tentative reading comprehension skills model. The CLAS model are used as an intervention program to improve the reading comprehension of students.

2.4 Underpinning Theory

The information processing theory postulates that humans process information rather than just responding to stimuli. Information is absorbed through the senses and then processed in the short-term memory. The information is subsequently encoded and sent to long-term memory, where it is kept.

Information Processing Theory (IPT), developed by American psychologists including George Miller in the 1950s, has recently equated the human brain to a computer. The 'input' is the information we provide to the computer - or to our brains - whereas the CPU is analogous to our short-term memory and the hard-drive is analogous to our long-term memory.

Information processing theory explains the process of brain movement when humans obtain information. The combination of neurolinguistics and information processing theory can perfectly explain the mechanism of the human brain when reading. At the same time can guide humans to the learning of reading in foreign language. The machinery of the mind contains attention processes for bringing in information, working memory for actively processing information, and long-term memory for passively storing information for future use (Peter, 2010).

Learning is a change in one's state of knowledge, which is stored in memory, including processes of selecting information in short-term memory (Recognition, Perception, and Attention), translating information (Encoding), elaborating information in long term memory (Elaborative Operation Processes), and recalling or decoding that information (Retrieval). All of these processes are controlled by centralized information processing (Metacognition) (Klausmeier, 1985; Osman & Hanafin, 1992; Woolfolk, 2004).

The Information Processing Theory is a cognitive framework that describes how our minds process information as we learn and interact with the world around us. It explains how information is received, stored, manipulated, and retrieved from memory. In the context of enhancing Japanese reading comprehension skills among students, this theory provides valuable insights into how learners can better understand and retain the content they read. Incorporating the principles of the Information Processing Theory into teaching methods can help students systematically improve their Japanese reading comprehension skills. It emphasizes the importance of attention, perception, encoding, working memory, and effective strategies for retention and retrieval, all of which contribute to a more holistic understanding of the text.

3. Research Method

3.1 Research Design

This research was divided into three phases that involved investigating the current problems through a contextual study, constructing a tentative model, and implementing it. In the first phase, document research, questionnaires, and interviews were conducted in order to investigate the current problems in reading comprehension skills. In the second phase, the findings from the first stage are used to construct a new instructional model to enhance Japanese reading comprehension skills among university students. The final phase is implementation and confirmation of the instructional model's effectiveness.

3.2 Procedure

This research was mainly divided into three phases: contextual study, construct tentative model and implementation. The details procedure of this study as appended below:

Phase I Contextual study

This phase used document research, questionnaires, and interviews to identify the current problems of implementation of Japanese reading and investigate the current problems in reading comprehension skills towards reading in the Japanese language in the context of university students. The data is collected from students and teachers in order to understand the current situation. The respondents for this study were 66 students of Shaoyang

University who studied Japanese as a second foreign language in the School of Foreign Languages. These students are volunteers to respond to the survey form from second- and third-year students with different genders and language levels. They study the Japanese language for more than one term (12 weeks), which is more than 36 hours of classroom learning.

Phase II Construct tentative model

In this phase, the instructional model to enhance Japanese reading comprehension skills among university students has been developed and confirmed. It developed from the findings in the first phase (survey) that led to the construction of a new instructional based on CLAS model to enhance Japanese reading comprehension skills among university students. Beside the tentative instructional model, there was also a lesson plan, reading comprehension test paper, and assessment form.

Then, the document was tested on third-year students from seven participating classrooms (n = 43) majoring in English who study Japanese as a second foreign language in the School of Foreign Languages at Shaoyang University in China. They are all native speakers of Chinese and have studied EFL through formal instruction at school for at least seven years. The findings from this phase have been used to improve the model before it can be implemented. The pilot test has been conducted at this stage in order to enhance the applicability of the model. The 43 students are involved in this process, and the new instructional model based on CLAS model is suitable for the implementation phase.

Phase III Implementation

The last phase is to implement and confirm the instructional model's effectiveness. This study has been divided into a control group and an experimental group in order to measure the effectiveness of the model. It describes the scope, construction, and development of research instruments and variables. The control group uses traditional instructional methods, and the experimental group uses a new instructional model called the CLAS model and lesson plan. 36 students in one class as a control group (CG) and 36 in another class as an experimental group (EG)

The samples are two natural classes with 72 third-year students (enrolled in 2018). These subjects have the same Japanese level but different genders and ages. One class (n = 36) as a control group (CG) uses the traditional instructional model, and another class (n = 36) as an experimental group (EG) uses the new instructional model. The time scope in this phase is from September to December 2020 and totals 36 hours of classroom teaching.

3.3 Data Analysis

The final data were examined using independent t-tests to compare means, percentage (%), means (x), and standard deviations (SD). The experimental group (EG) used a new instructional approach while the control group (CG) used a standard instructional model to compare student achievement. The data were analyzed using SPSS based on the test paper scores to get average findings and standard deviations. The test results from the experimental group and the control group are then compared to see if the experimental group performed better than the control group. This test is to analyze the improvement of reading comprehension. Based on the students' self-evaluation, the SPSS is used to examine if the reading comprehension skill has improved and whether the students are satisfied with the new teaching approach.

4. Results and Discussion

The results of using the instructional model by mean of reading comprehension skills are assessed. The result of the implementation stage is that the new teaching method is remarkable. Compared with the control group using the traditional method, the experimental group using the new teaching method has improved reading comprehension skills. Through specific analysis, experimental group has a better grasp of the basic knowledge than control group. Control group spends more energy on the memory of vocabulary and language points, while experimental group is more inclined to grasp the entire chapter.

The results of significance of the CLAS Model for the new teaching method is described the reading comprehension skills. The compared results have shown the improvement of reading comprehension skills through the scores of the students' reading comprehension test papers (Table 2). The baseline of scores among EG (36 students) and CG (36 students) are not much different. Comparing the scores of vocabularies, grammar, reading, and translation, it is found that the average score of the EG group is higher than that of the CG group. It proves that the new model is helpful to the improvement of reading comprehension skills and is significant.

Table 2. Comparison of the Overall Scores of the Two Groups (CG & EG)

Groups	S.D.	Mean (point)
1 (CG)	12.2	70.6
2 (CG)	14.3	68.7
3 (EG)	13.8	74.8
4 (EG)	12.4	74.2

(The total score of the Test 2 is 100 points.)

Further the test is comparing the scores of the sub-items has shown in Table 3. Comparison of sub-items of the four classes (two EG and two CG). Here is a comparison of the individual average scores and excellence rates of the four classes. The average scores of vocabularies and reading comprehension are higher in the EG group than in the CG group. The excellent rate of EG for vocabulary questions is significantly higher than that of CG. And the failing rate, EG is lower than CG. The grammar questions in the EG group have an excellent ratio higher than the CG (pass rate, EG<CG). For reading comprehension questions, the excellent rate of EG is significantly higher than CG (EG<CG). In summary, comparing the average scores of individual items, the scores of vocabularies and reading comprehension, the EG group is higher than the CG group (EG>CG). Grammar and reading scores are not significant.

Table 3. Mean of Sub-item of Two Groups (CG & EG)

Class	Vocabulary (15%)	Grammar (10%)	Reading Comprehension (50%)	Translation (Ja-CN)(10%)	Translation (CN-Ja)(15%)
1 (CG)	7.7	6.0	33.9	9.6	13.4
2 (CG)	6.7	5.7	34.1	9.5	12.8
3 (EG)	9.4	6.0	36.4	9.6	13.4
4 (EG)	9.6	5.8	36.2	9.8	12.8
Weightage	15	10	50	10	15

To further compare the excellent rate of individual items, for the convenience of comparison, the scores of each individual item are divided into three level. They are Good, Passed and Failed. Those with a score higher than 80% are good (including 80%), those with a score less than 60% are Failed, and the rest are Passed.

Here is an explanation of the classification criteria for excellent, passing, and failing, as well as the scores for individual items that meet these criteria. Good [80-100) means the score is greater than or equal to 80 point. Failed (<60) means the score is less than 60 points. Passed means the score is greater than or equal to 60 point, and also less than 80 points.

Table 4. Individual Weightage, Good, Passed, and Failed Score (point)

Sub-item	Weightage	Good (80% and above)	Passed (60% - 79%)	Failed (below 60%)
Vocabulary	15	≥12	9 -12	<9
Grammar	10	≥8	6-8	<6
Reading	50	≥40	30-40	<30
Translation (Japanese to Chinese)	10	≥8	6-8	<6
Translation (Chinese to Japanese)	15	≥12	9 -12	<9

In sub-item, the weightage of Vocabulary is 15 points, good is greater than or equal to 12 points. Failed is less than 9 points. Passed is less than 12 and greater than or equal to 9 points. Translation (CN-Ja) is same. The weightage of Grammar is 10 points, good is greater than or equal to 8 points. Failed is less than 6 points. Passed is less than 8 and greater than or equal to 6 points. Translation (Ja-CN) is same. The weightage of Reading Comprehension is 50 points, good is greater than or equal to 40 points. Failed is less than 30 points. Passed is less than 40 and greater than or equal to 30 points.

Table 5. The Percentage of Good, Passed, and Failed for all Categories

Class	Vocabulary (15%)			Grammar (10%)			Reading Comprehension (50%)			Translation (Ja-CN) (10%)			Translation (CN-Ja) (15%)		
	Good	Pass	Fail	Good	Pass	Fail	Good	Pass	Fail	Good	Pass	Fail	Good	Pass	Fail
1 (CG)	18.8	34.4	46.9	18.8	50.0	31.3	21.9	56.3	21.9	96.9	3.1	0	87.5	9.4	3.1
2 (CG)	13.9	22.2	63.9	11.1	41.7	47.2	22.2	61.1	16.7	94.4	2.8	2.8	83.3	5.6	11.1
3 (EG)	36.1	25.0	38.9	19.4	36.1	44.4	36.1	47.2	16.7	94.4	5.6	0	91.7	0	8.3
4 (EG)	30.2	30.2	39.5	20.9	37.2	41.9	32.6	48.8	18.6	100	0	0	76.7	14.0	9.3
Total															

Table 5 shows all categories in detail for comparing the EG and CG. For Vocabulary, the good rate of EG is higher than that of CG, which is significant. While the percentage of failed students in EG is significantly lower than in CG. The good rate of Grammar among EG is higher than CG, but the passed rate has shown the other way around (EG<CG). For Reading comprehension questions, the good rate of EG is higher than that of CG, which is significant. However, the pass has shown EG is less than CG (EG<CG). Both translations, Ja-CN and CN-Ja, are insignificant in this test. In summary, by comparing the total average score of the whole set of test papers, the average score of each individual item, and the good rate, it is found that EG is significantly higher than CG in terms of vocabulary and reading. In terms of Translation, EG is higher than CG, but it is not significant.

The findings are in line with the previous studies for vocabulary and grammar. For example, Carrell (1989), Nwabueze and Iwekpeazu (2011), Oxford (1997), and Moerk (1994) found methods such as reducing the obstacles (vocabulary and grammar), creating a reading environment, and encouraging group studying. Vocabulary and grammar play crucial roles in enhancing students' reading skills. They are the building blocks of language comprehension, enabling students to understand written texts more effectively. Ultimately, a strong vocabulary and solid grasp of grammar empower students to engage with a wide range of texts, comprehend complex ideas, and develop a lifelong love for reading and learning.

Reading comprehension also shows better results using the new instructional model. By honing this skill, students can become more effective learners, critical thinkers, and communicators. Reading comprehension is a critical skill that significantly enhances students' overall reading abilities. It involves understanding, interpreting, and analysing written text to extract meaning and connect it with prior knowledge. In summary, the result is the same based on Beglar et al.'s (2011) findings that reading comprehension was consistently high when using the specific model to read in Japanese.

It's important to note that the significance of translation elements in reading comprehension can vary depending on factors such as the difficulty of the text, the proficiency of the reader, and the specific objectives of the comprehension task. Effective translation for comprehension requires a balance between accuracy and conveying the main ideas in a clear and natural way. The result of this study has shown that both translations (Ja-CN and CN-Ja) between EG and CG are insignificant.

5. Conclusion and Recommendation

The CLAS model enhanced reading comprehension that aims at students' actual problems, through teaching procedures and classroom activities, allows students to find the reasons for their lack of linguistic knowledge, and leads students to solve problems. It takes time for students to improve their Japanese reading ability. In two or three months, students can develop the habit of analyzing sentences and increasing the volume of words. Reading achievement will affect students' reading attitudes, and positive attitudes make students work hard to learn reading comprehension.

For the specific application, the CLAS model holds significant potential for enhancing Japanese reading comprehension among university students. This advanced driven model combines natural language processing techniques with contextual understanding to provide tailored and effective learning experiences. For example, The CLAS model can assess each student's proficiency level and learning pace, adapting its content and difficulty accordingly. This personalized approach ensures that students are challenged appropriately and can gradually progress from simpler texts to more complex ones, fostering a smoother learning curve.

Furthermore, the model can provide immediate and specific feedback to students as they interact with Japanese texts.

It can point out errors in comprehension, grammar, and vocabulary usage, helping students identify and correct their mistakes in real-time, thus accelerating their learning process. By analyzing the context of the texts, the CLAS model can introduce new vocabulary words in a meaningful context. This helps students not only understand the words' meanings but also grasp how they are used in sentences, leading to more effective retention and application. In addition, Japanese reading comprehension often requires understanding cultural nuances and references. The CLAS model can provide explanations and background information on cultural aspects mentioned in the texts, enabling students to gain a deeper appreciation of the language and its cultural context. Japanese features complex sentence structures that can pose challenges for learners. The CLAS model can break down intricate sentences, highlight grammatical patterns, and provide step-by-step explanations, making it easier for students to decipher and analyze complex texts. The CLAS model also can offer interactive exercises and quizzes that require students to apply their comprehension skills. These exercises can simulate real-world scenarios and encourage active engagement, helping students bridge the gap between theoretical understanding and practical application.

As a reading strategy, the CLAS model can teach various strategies, such as skimming, scanning, and inference-making. These strategies are essential for efficiently navigating through Japanese texts, especially when dealing with larger volumes of material, as often encountered in university-level studies. It also can continuously monitor students' progress and adapt its content accordingly. It can identify areas of weakness and provide targeted practice exercises to reinforce those areas, ensuring a comprehensive and well-rounded improvement in reading comprehension skills.

In conclusion, the CLAS model has the potential to significantly enhance Japanese reading comprehension among university students by offering personalized learning paths, adaptive feedback, vocabulary expansion, cultural context understanding, assistance with complex sentence structures, interactive practice, reading strategies, continuous assessment, and flexible accessibility. By combining AI-driven technology with language learning needs, the CLAS model can empower students to become more confident and proficient readers of Japanese texts.

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Competing interests

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Sciedu Press.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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