

Effective Utilization of AI Tools in University English Education: A Practical Study of Claude-Based Writing Instruction Models Tailored to Learners' Proficiency Levels

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Abstract: This study proposes and evaluates a novel approach to English writing instruction utilizing generative AI (Claude) for university students with low English proficiency. Based on the theoretical foundations of the traditional Japanese "Shu-Ha-Ri" philosophy (a three-stage learning progression where one first follows tradition, then breaks from it, and finally transcends it) and Vygotsky's Zone of Proximal Development (ZPD) theory, multiple writing patterns tailored to learners' proficiency levels were created and provided through generative AI. A three-month implementation with 45 first-year science university students revealed that all participants acquired English composition skills at or above the EIKEN Grade 4 level, with 94% self-reporting improvement in their writing abilities. The acquisition of structured patterns in the "Shu" (following) stage particularly enhanced grammatical accuracy, organizational skills, and vocabulary diversity, with 87% of students reporting increased confidence in English writing. This study demonstrates the educational potential of generative AI in creating personalized language learning environments while presenting a teacher-led model for AI utilization. Future challenges include establishing developmental teaching methods beyond the "Shu" stage toward "Ha" (breaking) and "Ri" (transcending), as well as fostering AI literacy among learners themselves.

本研究では、英語力の低い大学生を対象に、生成 AI (Claude) を活用した新しい英語ライティング指導アプローチを提案・評価する。日本の伝統的な「守破離」哲学（まず伝統に従い、次にそれを破り、最終的にそれを超越するという三段階の学習過程）とヴィゴツキーの最近接発達領域（ZPD）理論に基づき、学習者の習熟度に合わせた複数のライティングパターンが生成 AI を通じて作成・提供された。理系大学 1 年生 45 名を対象とした 3 ヶ月間の実施により、全参加者が英検 4 級以上のレベルの英作文能力を獲得し、94%が自己評価においてライティング能力の向上を報告した。特に「守」（従う）段階における構造化されたパターンの習得は、文法の正確さ、構合力、語彙の多様性を高め、87%の学生が英語ライティングに対する自信の向上を報告した。本研究は、個別化された言語学習環境を創出する生成 AI の教育的可能性を実証するとともに、教師主導の AI 活用モデルを提示している。今後の課題としては、「守」段階を超えて「破」（破る）と「離」（超越する）段階に向けた発展的指導法の確立、および学習者自身の AI リテラシーの育成が挙げられる。

Key words: Generative AI, English writing instruction, Scaffolding, Zone of Proximal Development,

1. Introduction

For university students, expressing opinions and impressions in English is both an important and

challenging task. Particularly for students with limited English proficiency, expressing themselves in appropriate linguistic forms presents significant

difficulties. When asked to express opinions in English, many students struggle to find appropriate expressions and tend to be limited to simple phrases such as "It's good." This difficulty extends beyond mere language barriers; clearly articulating one's opinions and impressions can be challenging even in one's native language.

The university where this research was conducted is a science-focused institution with a relatively high proportion of students with low English proficiency who take English courses as a requirement to graduate. Therefore, focusing on students who struggle with English, the author introduced an approach based on the traditional Japanese philosophy of "Shu-Ha-Ri." This method begins with the "Shu" (following) stage, where students form foundational language skills and confidence by repeatedly practicing established patterns of speech and writing. Building on this foundation, through gradual learning progression, the goal is to achieve creative and autonomous language expression in the "Ri" (transcending) stage.

This research aimed to verify the educational effectiveness of introducing generative AI tools in English writing education as an innovation in teaching methods at the "Shu" stage. Specifically, the author attempted to create an individually optimized learning environment that transcends the limitations of conventional uniform instruction by generating multiple writing patterns adapted to students' English proficiency levels using AI. This paper discusses the methodology and outcomes of this practice, as well as future challenges for developing beyond the "Shu" stage to the "Ha" and "Ri" stages while adapting to the rapid evolution of AI tools.

2. Background

2.1 Ministry of Education Guidelines on Utilizing Generative AI in Educational Settings

Generative AI is rapidly evolving and becoming widespread, having disruptive impacts on society at an unprecedented pace due to its practicality and risks. To maximize the effective use of such generative AI in educational settings, the Elementary and Secondary Education Bureau of the Ministry of Education, Culture, Sports, Science and Technology (2024) has provided "Guideline for the Use of Generative AI in Primary and Secondary Education."

The current Course of Study which the Ministry of Education, Culture, Sports, Science and Technology (hereinafter referred to as MEXT) published in 2018 positions "information utilization skills" as a foundational quality alongside language and problem-solving abilities, emphasizing the importance of actively utilizing information in an unpredictable society. The Elementary and Secondary Education Bureau of MEXT presents specific examples of applications, such as creating "drafts" for teaching materials and confirmation test questions, and simulating responses to questions in class. The same guidelines indicate that the introduction of services using generative AI is expected to realize individually optimized learning and deepen learning, while also mentioning AI literacy required of teachers. In particular, it emphasizes the view that the educational use of AI should be grounded in teachers' daily engagement with AI technologies and their deep understanding of its characteristics (MEXT, Elementary and Secondary Education Bureau, 2024).

In higher education, the developmental cultivation of information utilization skills requires the training of human resources equipped with advanced critical thinking and creative problem-solving abilities. This educational goal is clearly indicated in the "Grand Design for Higher Education toward 2040" (MEXT, 2019) as nurturing human resources to live in an unpredictable era.

Additionally, regarding the use of generative AI in higher education institutions, MEXT announced a new policy in 2023 indicating how universities and National Institutes of Technology (KOSEN) should handle generative AI in educational aspects. While respecting the autonomous decisions of each university, this policy calls for both the enhancement of educational effectiveness and the development of information literacy among learners.

In English education, generative AI's language processing capabilities hold great potential, particularly in understanding language structures and developing practical communication skills (Tseng & Warschauer, 2023a).

This research puts these guidelines into practice by utilizing generative AI to provide "patterns" in English writing instruction. This approach aims to improve the quality of university English education by enhancing learners' composition skills and providing effective teacher feedback.

2.2 Previous Research

In theoretically examining the use of generative AI in language education, Vygotsky's (1978) concept of the Zone of Proximal Development (ZPD) serves as an important foundation. ZPD refers to the area between a learner's current developmental level, where they can solve problems independently, and their potential developmental level, where they can solve problems with guidance from others. Learning within this zone is considered most effective for development. Wood, Bruner, and Ross (1976) developed this concept and proposed the concept of "scaffolding," where educators provide support according to the learner's developmental stage. They define scaffolding as follows:

"Scaffolding consists essentially of the adult 'controlling' those elements of the task that are initially beyond the learner's capacity, thus permitting him to

concentrate upon and complete only those elements that are within his range of competence" (Wood et al., 1976, p. 90). In other words, scaffolding is a process that enables learners to solve tasks they could not accomplish independently, with the importance of supporters gradually reducing assistance at appropriate timing.

Chapelle and Sauro (2017) in "The Handbook of Technology and Second Language Teaching and Learning" comprehensively analyzed the impact of technology on language learning, providing a theoretical framework for how digital tools play supportive roles in all areas of second language acquisition. They subsequently developed this concept further, arguing that in language learning, technology functions as a mediator connecting learners and language. Particularly in second language acquisition, they suggested that scaffolding provided by technology works to reduce learners' cognitive load and promote the internalization of language knowledge.

In recent research, the potential for AI to play a role in scaffolding language learning has gained attention. Tseng and Warschauer (2023b) demonstrated that immediate feedback from AI enhances learners' autonomy and self-regulation abilities, presenting the possibility of a methodology for utilizing AI as scaffolding, rather than simply depending on AI.

According to Enomoto, Warner, and Nygaard (2024), Vygotsky's concept of the Zone of Proximal Development acquires a new dimension in the context of AI-assisted learning. They argue that generative AI has the potential to function as a more capable peer or tutor, "dynamically adjusting its support to help learners achieve what they cannot do alone but are capable of doing with guidance" (pp. 21–22). Such scaffolding by AI is considered to provide

personalized learning support within the zone between a learner's current and potential developmental levels.

In Japanese research, Kanemaru (2023a) proposed the concept of "AI-Assisted Autonomous Learning (AAAL)." Based on Vygotsky's ZPD theory, Kanemaru positions AI as a learning supporter, noting that with the emergence of generative AI, the supporting role traditionally held only by humans can now be fulfilled by AI. The perspective that collaborative learning becomes possible through AI providing scaffolding for tasks students cannot solve independently is particularly noteworthy.

Furthermore, Kanemaru (2023b) emphasizes that this theory promotes the transition from other-regulated to self-regulated learning by learners and suggests that teachers should support students' AI utilization in areas where AI support is possible, while being directly involved in areas where such support is not appropriate. He also advocates the importance of a learning style that involves learning with AI, learning from AI, and learning about AI. This perspective is related to Zimmerman's (2008) theory of self-regulated learning, where Zimmerman explains the process of self-regulated learning in stages, discussing the development of learners' ability to regulate and manage their own learning process.

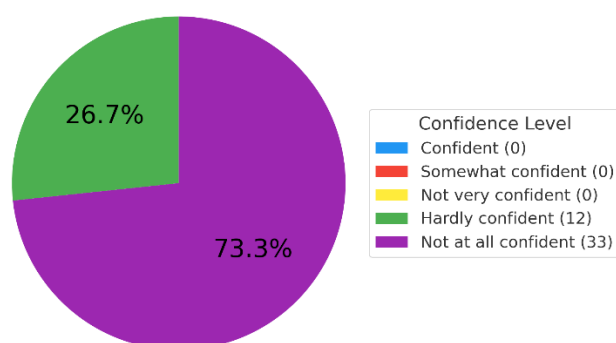
In this research, applying these theoretical frameworks, the author practically explores the

following three points. First, based on Vygotsky's ZPD theory, the author provides multiple levels of English sentence patterns created by teachers using generative AI as scaffolding to support learning according to the developmental level of students who struggle with English. Second, referring to Kanemaru's concept of AAAL, the author constructs a learning environment that enhances students' self-expression skills through teacher-led use of generative AI. Third, the author promotes the acquisition of patterns in the "Shu" stage of the Japanese "Shu-Ha-Ri" philosophy through generative AI-supported materials prepared by teachers and verify its effectiveness. Through these efforts, the author aims to propose a teacher-led practical utilization model of generative AI in English writing education.

2.3 Classroom Situation and Challenges

The subjects of this study were 45 first-year university students with diverse English proficiency levels ranging from EIKEN Grade 5 to Pre-2. In an awareness survey on writing conducted in April (Figure 1), most students showed a lack of confidence in writing. As shown in Figure 1, 33 students (73.3%) responded "completely unconfident," 12 students (26.7%) responded "mostly unconfident," and no students responded "confident" or "somewhat confident."

Figure 1: Responses to "Do you have confidence in writing in English?"



To objectively understand the students' actual situation, a reality assessment test was conducted, requiring students to respond to a task asking for opinions and impressions within 3 minutes without using supplementary materials such as dictionaries. Based on EIKEN evaluation criteria, as shown in the distribution of student levels in the writing reality assessment test results (Figure 2) and answer patterns by EIKEN level (Table 1), it became clear that in this class, despite more than half of the students having EIKEN Grade 3 to 4 level abilities in reading and

listening, they tended to have EIKEN Grade 5 level expression ability in writing. In particular, when expressing opinions and impressions, their syntax and vocabulary were extremely limited, with tenses restricted to the present tense, sentence structures limited to simple sentences, adjectives concentrated on "good" and "fun," and verbs concentrated on "like" and "want."

Figure 2: Distribution of Student Levels Based on Writing Reality Assessment Test Results

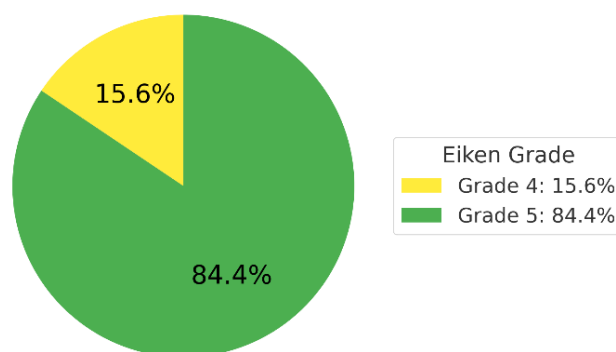


Table 1: Answer Patterns by EIKEN Level

Evaluation EIKEN Level	Main Answer Patterns of Students
Grade 4	Yes, I do. Because I like Sky Lodge Hotel. Yes, I do. Because it is good. Yes, I do. Because I like zipline. Yes, I do. Because zipline is interesting.
Grade 5	Yes, I do. It's good. Yes, I do. I like it. Yes, I do. I like zipline. Yes, I do. I want to stay.

Previously, the author had adopted a teaching method where a single writing pattern suited to the class's average ability was presented for each writing task, and students incorporated their individual opinions and impressions. However, this uniform method had multiple issues. For upper-level students, opportunities to use more complex syntax and advanced vocabulary were limited, leading to a lack of linguistic development opportunities. On the other hand, for lower-level students, the presented sentence patterns and vocabulary exceeded their comprehension level, hindering effective learning participation.

Additionally, it was difficult to promote linguistic diversity to express various opinions and emotions with a single pattern. Although developing multiple patterns tailored to individual proficiency levels would have been ideal, time constraints in developing and validating language structures suitable for each student's ability made this unrealizable. As a result, it was not possible to respond to the diverse learning needs within the class, and the instruction content became uniform, assuming an average student, resulting in a situation where optimized learning opportunities could not be provided to individual learners.

In this study, the author attempted an instructional approach to provide sentence patterns appropriately adjusted to each student's English proficiency level by utilizing the functions of AI language models such as Claude and Chat GPT4.0. Through this effort, the author aimed to create personalized learning opportunities according to individual students' English achievement levels and realize a more responsive educational environment. Specifically, the author

presented writing models adjusted to three difficulty levels (equivalent to EIKEN Grades 4, 3, and Pre-2) based on students' proficiency levels, and to verify the effectiveness of the practice, conducted a writing test again under the same conditions as the reality assessment to evaluate the changes in English composition ability before and after the intervention from three perspectives: content, organization, and grammatical accuracy.

3. Classroom Practice

3.1 Research Objectives

By using AI functions, the author aims to provide scaffold-like instruction according to individual abilities and improve individual writing skills. Additionally, by having AI provide specific writing examples and advice on vocabulary and syntax points, the author aims to promote autonomous learning, enhance spontaneous writing academic ability, and foster confidence. At the same time, the author aims to improve communicative interaction by integrating speaking with writing drafts.

3.2 Writing Tasks

To incorporate communicative interaction in the establishment process, the author set concise questions that could be answered with Yes/No and adopted a format requiring students to briefly describe the reasons for their answers as training in logical thinking. The word count was set at between 15 and 25 words, depending on students' achievement levels. Also, the task questions were related to content covered in class (Table 2). This was intended to promote vocabulary retention and facilitate smooth interaction by making topics related to recently learned common knowledge.

Table 2: List of Writing Tasks

Writing Task		Implementation Month
1	[Writing Reality Assessment Task] Do you want to stay at the Sky Lodge Hotel from the video? Why or why not?	April & September
2	Do you want to get the "Sloth Calendar" from the video? Why or why not?	October
3	Do you want to join disaster volunteer work like those in the Noto earthquake news? Why or why not?	November
4	[Writing Evaluation Test] Do you want to sing the English songs we learned in class at karaoke? Why or why not?	December

3.3 Generative AI and Prompts

In this study, Claude 3.5 (Sonnet) was used as the generative AI. After comparative examination with ChatGPT-4o, Claude 3.5 was chosen as it was the most recent (as of September 2024) and generated different levels of English expressions with high accuracy according to prompt instructions.

In prompt design, the author paid attention to the following points to generate example sentence templates that could adapt to individual students' emotions and opinions:

1. English text levels: Three stages corresponding to EIKEN Grades 4, 3, and Pre-2
2. Generation of 10 examples for each EIKEN level
3. Utilization of vocabulary learned in class
4. Presentation of linguistic and grammatical key points for each example sentence
5. Clear indication of student-modifiable parts in parentheses ()

Regarding the selection of English text levels, considering that the target students' current proficiency levels were approximately EIKEN Grades 5 to 4, the author set the above three levels aiming for the acquisition of writing ability one rank higher.

Regarding the number of examples, to diversify students' options, 10 examples were presented at each

level, including both affirmative (Yes) and negative (No) opinions.

In utilizing AI, the author provided the English script of the textbook video used in class as context, promoting the generation of example sentences that reflected the vocabulary already learned. Each example was annotated with grammatical, lexical, and expression key points to help students understand the writing techniques corresponding to that level. Additionally, the author instructed the AI to indicate customizable parts in parentheses () for easy application by students, also reducing the teaching load for instructors.

The author typed the following prompt into Claude.

You are an expert in English education for first-year university students. After conducting a class about Sky Lodge Hotel, you asked students the following question: "Do you want to stay at the Sky Lodge Hotel from the video? Why or why not? Answer in 15-25 English words." Please create model answer examples by EIKEN level for this question.

Requirements:

1. EIKEN levels: Grade 4, Grade 3, Pre-2
- 2.5 affirmative answers (Yes) and 5 negative answers (No) for each level

3. Word count limits: Grade 4: about 15 words,
Grade 3: 15-18 words, Pre-2: 15-25 words
4. Annotate each example with grammar and
vocabulary key points
5. Present in table format
6. For use as templates, keep fixed expressions as
they are, and enclose parts that students can
customize in parentheses ().
Example: "Yes, I want to stay there. (Sleeping
in a glass room on a mountain) sounds
(exciting)!"

3.4 Implementation Method

3.4.1 Implementation Flow

1. First, students were presented with the writing
task shown in Table 2, and as a preliminary step
before considering their answer, they were asked
to describe their opinions, impressions, and
reasons in three keywords. At this stage, both
Japanese and English keywords were accepted,
emphasizing the externalization of their honest
feelings and thoughts.
2. Next, level-specific answer patterns created by
generative AI were presented (Table 3 "EIKEN
Level-Based Sky Lodge Hotel Answer
Templates"). In the table, text that students could
use directly were shown in bold.
3. Grammatical and vocabulary points at each
EIKEN level were explained, and attention was
drawn to the differences in expressions between
different levels.
4. Students selected a template considering their
current English proficiency level and target level.
In doing so, they chose the pattern that could best
reflect the three keywords they had previously
written, and inserted appropriate vocabulary

researched using dictionaries, etc., into the
variable parts (indicated by parentheses) to
express their opinions and feelings.

5. The teacher individually checked the completed
English sentences of each student. This
verification process was efficient as it was based
on fixed patterns, resulting in fewer errors (future
consideration is being given to having students
themselves use generative AI for self-
verification).
 6. Using the verified English sentences, students
practiced orally while changing pairs. This
repetitive practice promoted the retention of
expressions.
 7. After becoming fluent in oral production,
students repeatedly practiced writing the English
sentences to internalize the expressions.
 8. A test with the same format of writing task was
conducted without manuscript reference to
evaluate the retention of learning content.
- The above processes 1-8 were repeatedly
implemented with different tasks.

3.4.2 Educational Effects

By repeating this stepwise approach with multiple
tasks, learners were able to acquire structural patterns
in writing while gradually mastering more advanced
expression methods. Additionally, as common phrases
and vocabulary for self-expression were clarified,
students became able to express their opinions and
feelings more specifically and appropriately,
contributing to fostering confidence in English
writing.

Table 3: [EIKEN Level-Based Sky Lodge Hotel Answer Templates]

EIKEN Grade 4 Level

No.	＜英検 4 級レベル＞ 回答テンプレート	ポイント
1	Yes, I want to stay there. (The hotel) looks (beautiful) and I like (mountains).	<ul style="list-style-type: none"> ・単純な肯定文 ・基本的な動詞 (look) ・単純な好みの表現 (I like)
2	Yes, I want to go there. I can see (stars at night) from (the room).	<ul style="list-style-type: none"> ・単純な願望表現 (want to) ・基本的な可能表現 (can see) ・場所の表現 (from)
3	Yes, because (the view) is (amazing). I want to take (many pictures) there .	<ul style="list-style-type: none"> ・単純な理由付け (because) ・基本的な形容詞 (amazing) ・目的の表現 (want to take)
4	I want to stay there. (The glass rooms) look (cool) and (the view) is (nice).	<ul style="list-style-type: none"> ・単純な複文構造 (want to stay) ・基本的な形容詞 (cool /nice) ・接続詞 (and) による連結
5	Yes, I want to stay there with (my friends). We can enjoy (the beautiful view).	<ul style="list-style-type: none"> ・前置詞の基本的使用 (with) ・簡単な説明 (the beautiful view) ・基本的な動詞 (enjoy)
6	Yes, I like it. I want to see (the stars and clouds) from (the glass room).	<ul style="list-style-type: none"> ・単純な好み表現 (like/ want to) ・具体的な目的語 (the stars and clouds) ・基本的な前置詞句 (from)
7	No, I don't want to stay there. I'm afraid of (heights). It's too (scary).	<ul style="list-style-type: none"> ・単純な否定文 ・基本的な感情表現 (afraid of) ・「too + 形容詞」の基本構文
8	No, because it's too (expensive). I want to stay at a (cheaper) hotel .	<ul style="list-style-type: none"> ・単純な理由の説明 ・比較級の基本形・単純な願望表現
9	No, I don't like it. I'm scared of (high places) and (glass floors).	<ul style="list-style-type: none"> ・単純な否定表現 ・基本的な感情表現 (scared of) ・単純な複数名詞
10	No, because I can't (climb mountains). It's too (difficult) for me .	<ul style="list-style-type: none"> ・単純な否定の可能表現 (can't) ・自己評価表現 (too difficult for me) ・単純な理由説明 (because I can't)

EIKEN Grade 3 Level

No.	＜英検3級レベル＞ 回答テンプレート	ポイント
1	I'd love to stay in (the glass capsule) and enjoy (the beautiful view of Peru's mountains).	<ul style="list-style-type: none"> ・「would love to」構文 ・具体的なホテルの特徴 ・地理的情報 (of Peru's mountain)
2	Yes, definitely! Sleeping in (a transparent pod) that (hangs from a cliff) would be (amazing).	<ul style="list-style-type: none"> ・強調表現 (definitely) ・ホテルの具体的な特徴 ・関係代名詞で説明 (that) ・仮定法表現 (would be)

No.	<英検3級レベル> 回答テンプレート	ポイント
3	I think it's worth (the money) to (see the stars and valleys from a glass room).	<ul style="list-style-type: none"> ・ 価値判断表現 (worth) ・ 具体的な景観 ・ ホテルの特徴への言及
4	I'd choose this hotel to (watch the sunset and stars from a transparent capsule).	<ul style="list-style-type: none"> ・ 仮定法表現 (I'd choose) ・ 具体的な景観の特徴 ・ ホテルの特徴への言及
5	Yes, I'm excited about (the adventure of climbing to the hotel) and (enjoying the scenery).	<ul style="list-style-type: none"> ・ 感情表現 (excited about) ・ アクセス方法への言及 ・ 目的表現 (enjoying)
6	It looks (wonderful), but I'm (nervous about) (sleeping in a transparent room so high up).	<ul style="list-style-type: none"> ・ 逆接表現 (but) ・ 感情表現 (nervous) ・ ホテルの位置と特徴への言及
7	No, I wouldn't stay there as I'm (terrified of) (climbing 400 meters up a cliff).	<ul style="list-style-type: none"> ・ 仮定法の否定形 (I wouldn't) ・ 「as」による理由説明 ・ ホテルへのアクセス方法への言及
8	No, not for me. I wouldn't enjoy (riding a zipline to leave the hotel).	<ul style="list-style-type: none"> ・ 簡潔な否定表現 (not for me) ・ 仮定法表現 (wouldn't enjoy) ・ ホテルからの帰り方への言及
9	(The transparent walls) sound (amazing), but I'm worried about (the difficult climb to reach it).	<ul style="list-style-type: none"> ・ 感想表現 (sound) ・ 逆接 (but) ・ アクセス方法への懸念
10	No, I wouldn't feel comfortable in (a glass pod) (hanging from a mountain at night).	<ul style="list-style-type: none"> ・ 快適さの表現 (feel comfortable) ・ 否定の仮定法 ・ ホテルの特徴と時間帯への言及

EIKEN Grade Pre2 Level

No.	<英検準2級レベル> 回答テンプレート	ポイント
1	I would definitely like the chance to (stay in a see-through room) that is (hanging above a beautiful valley).	<ul style="list-style-type: none"> ・ 強調表現 (definitely) ・ やや発展的な語彙 (see-through) ・ 関係代名詞 (that is)
2	(The Sky Lodge) offers people a good chance to (connect with nature) while (staying in comfortable rooms with a great view).	<ul style="list-style-type: none"> ・ 適切な動詞 (offers) ・ 発展的な語彙 (connect, comfortable) ・ 同時性の表現 (while)
3	I'm interested in the idea of (sleeping high above the valley), but (the difficult climb to get there) concerns me.	<ul style="list-style-type: none"> ・ 発展的表現 (interested in) ・ 適切な形容詞 (difficult) ・ 形式的表現 (concerns me)
4	The experience of (watching stars from a glass pod) seems worth (the challenging climb and possible fear of heights).	<ul style="list-style-type: none"> ・ 名詞句 (the experience of) ・ 価値判断 (seems worth) ・ 発展的語彙 (challenging, possible)
5	I would really enjoy the chance to (view Peru's landscape from such a special position), despite (the difficult journey to reach it).	<ul style="list-style-type: none"> ・ 強調表現 (really) ・ 発展的な名詞 (position, journey) ・ 譲歩表現 (despite)

No.	<英検準2級レベル> 回答テンプレート	ポイント
6	When considering my (desire for adventure) against (practical safety worries), I would still choose this (special experience) in spite of the difficulties.	<ul style="list-style-type: none"> 思考表現 (considering) 発展的語彙 (desire, practical) 譲歩表現 (in spite of)
7	Although I find (the concept interesting), my (fear of heights) would probably prevent me from (enjoying this elevated hotel).	<ul style="list-style-type: none"> 譲歩表現 (Although) 適切な動詞 (find, prevent) 発展的形容詞 (elevated)
8	(The impact on the environment) and (the difficult access) matter more to me than my curiosity about (trying this unusual accommodation).	<ul style="list-style-type: none"> 環境への言及・比較表現 (matter more) 発展的名詞 (impact, curiosity, accommodation)
9	While it seems (well-designed), I don't believe the experience justifies (the damage to nature and the high cost).	<ul style="list-style-type: none"> 譲歩表現 (While) 判断表現 (don't believe, justifies) 発展的表現 (damage to nature)
10	(The transparent rooms) attract me, but I'm concerned about (losing privacy despite the amazing views).	<ul style="list-style-type: none"> 適切な動詞 (attract) 譲歩表現 (but) 発展的表現 (losing privacy, despite)

3.5 Results and Discussion

3.5.1 Writing Evaluation Test Results

After implementing three English writing instruction classes, to verify their educational effectiveness, a writing evaluation test (Table 1) on a new task was conducted with 35 subjects under conditions similar to the preliminary reality assessment, with a 3-minute time limit. In the evaluation of this test, superficial lexical errors such as spelling mistakes were excluded from the evaluation targets, and assessment was conducted with reference to EIKEN's Assessment Criteria for each grade and Guidelines from the following three perspectives:

1. Content: Whether elements required by the task (opinions and reasons supporting them) are appropriately included

2. Organization: Whether the English composition and logical development are clear and effective
3. Grammar: Whether variation in sentence structures and their accurate use is observed

As a result of the evaluation, as shown in Table 4, all learners equaled or surpassed the EIKEN Grade 4 level of composition with simple sentences and basic vocabulary, acquiring English composition abilities at EIKEN Grade 4 or higher. A noteworthy point was observed by the researcher that students utilized patterns they had individually acquired through the three classes. Also, compared to the preliminary survey, there was a significant improvement in the diversity of vocabulary and syntax used.

Table 4: Writing Evaluation Test Results

EIKEN Level	Percentage of Students (%)	Main Answer Patterns of Students
Pre-2	14.2	<ul style="list-style-type: none"> • Yes, because I believe singing karaoke is very useful for me. I can learn many English words through the lyrics and improve my English skills. • I would definitely sing English songs at karaoke, as it gives me a wonderful opportunity to show off my friends. • No, because I don't think I have the singing skills. Also, I'm worried about my bad voice in front of people.
3	40	<ul style="list-style-type: none"> • Yes, I want to sing them at karaoke. Singing in English sounds cool and exciting. • Yes, because the English songs sound exciting and I want to sing with my friends. • I'd love to sing English songs at karaoke because it's enjoyable. I can study English from songs.
4	45.7	<ul style="list-style-type: none"> • Yes, I want to sing the songs. I like English songs and English songs are cool. • Yes, I want to sing the songs because they are easy and fun. • No, I don't want to sing in English because it's hard for me.
5	0	

3.5.2 Post-Questionnaire Survey

A questionnaire survey was conducted with 45 students, and valid responses were obtained from 43 students.

Figure 3 shows the results of responses to the question "Have you become able to write in response to English questions asking for simple opinions and impressions through the writing classes?"

Furthermore, Table 5 shows the reasons (multiple responses allowed) given by the 40 students who responded "I have become able to write" in Figure 3. 94% of all students responded that they "have become able to write," and the reason cited as the acquisition of "patterns and procedures when writing," which the teacher had set as the purpose of the class, suggests

that the educational intention of the class has been achieved to a certain extent.

Also, Figure 4 shows the responses to the question about "change in confidence before and after writing instruction," and Table 6 shows the reasons given in free descriptions by the 38 respondents who answered, "I have gained confidence." These descriptions suggest that by repeatedly speaking and writing the same language patterns, the learning content was retained, contributing to the improvement of learning motivation.

On the other hand, among the 5 respondents who answered, "I have not gained confidence," descriptions such as "I understood the patterns, but I am unsure if I can actually use them" were also

observed, revealing that not all students gained sufficient confidence. This point will be an important consideration in future class design.

Figure 3: Responses to "Have you become able to write in response to English questions asking for simple opinions and impressions?"

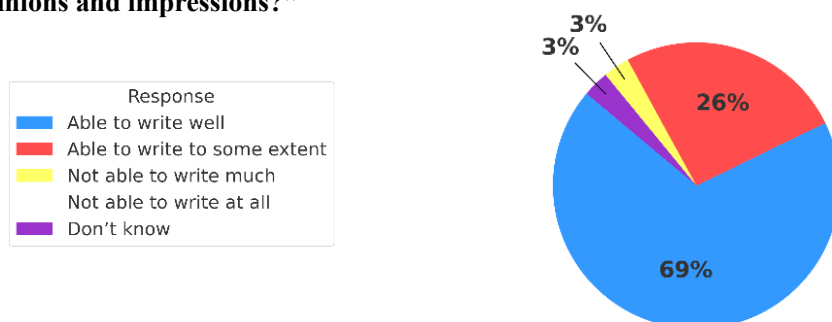


Table 5: Reasons Given by 40 Students Who Responded "I have become able to write" in Figure 3 (Multiple Responses Allowed)

Response Content	Number of People
Because I understood the patterns.	35
I understood the procedure of what to do when writing.	35
Because I can write what I want to say to some extent.	21
Because I understood the points for leveling up English sentences.	21
Because my vocabulary increased.	10
Other: Free description	1
Because I was able to learn how others write through pair work	

Figure 4: Responses to "Question about Change in Confidence"

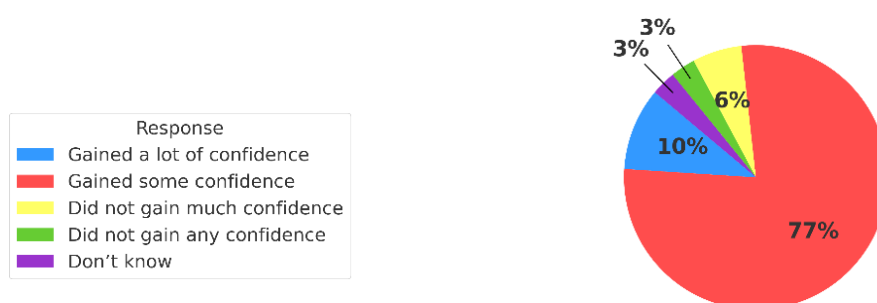


Table 6: Reasons Given by Students Who Responded "I have gained confidence"
(Multiple Responses Allowed)

Free Description Column	Number of People
Because I practiced writing repeatedly and remembered	15
Because I practiced saying repeatedly and remembered	15
Because I became able to say fluently	15
Because I became able to write at my level.	14
Because remembering patterns reduces mistakes.	13

3.5.3 Discussion

As a result of the analysis, the following points became clear:

1. The presentation of example sentences including answer templates clarified the learners' writing process, improving the efficiency of text production. Furthermore, by providing diverse example sentences, learners became able to express their individual opinions more effectively.

2. Through the acquisition of sentence structures incorporating their own opinions and perspectives, improvement in learners' practical language usage abilities can be expected. This acquisition process is also thought to have contributed to the formation of confidence that learners can appropriately express their opinions.

3. Oral repetition practice after sentence composition promoted cognitive retention, and an improvement in acquisition efficiency in subsequent writing practice was observed.

Additionally, the following trends regarding AI utilization were also observed:

1. Learners demonstrated the ability to select and utilize appropriate model sentences according to their language proficiency levels.

2. Through the stepwise language models and learning guidance provided by AI, learners gained opportunities to acquire more advanced expression patterns according to their motivation. This led to some learners autonomously transitioning to more challenging vocabulary and structures at the next higher Eiken level.

4. Conclusion and Future Challenges

This study explored new possibilities for English writing instruction utilizing generative AI. Based on the traditional philosophy of "Shu-Ha-Ri," the author conducted instruction from sentence patterns as the "Shu" stage and demonstrated a method to overcome the limitations of conventional teaching methods by introducing generative AI.

In conventional pattern-based instruction, presentation was limited to a single example sentence, but with generative AI, it became possible to quickly provide multiple text models adapted to learners' proficiency levels. This method functioned as effective "scaffolding" bridging the gap between individual

learners' current abilities and potential developmental levels.

The significance of this study lies in demonstrating the possibility of a new educational approach where generative AI connects theoretical frameworks and practice in language education. Additionally, presenting a teacher-led model for utilizing AI, showing a method to maximize the educational benefits of AI while avoiding excessive dependence, is also considered an important achievement.

Future challenges include developing methods to foster appropriate AI literacy for learners themselves. Additionally, establishing teaching methods to develop from the "Shu" stage to the "Ha" and "Ri" stages is necessary. While adapting to the rapid evolution of AI tools, the author aims to build a more effective practical model for English writing instruction by connecting their characteristics with language education theory.

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