Global Research in Higher Education
ISSN 2576-196X (Print) ISSN 2576-1951 (Online)
Vol. 9, No. 1, 2026
www.scholink.org/ojs/index.php/grhe

Original Paper

A Look at Sketching in a Japanese University English Conversation Class

Robert Carl Olson[1]

[1] Hokkaido University of Science, Sapporo, Japan

Received: January 7, 2026 Accepted: January 14, 2026 Online Published: January 27, 2026

doi:10.22158/grhe.v9n1p32 URL:http://dx.doi.org/10.22158/grhe.v9n1p32

Abstract

It can be argued that Second Language Acquisition (SLA) classes are more visual that at any other time in history. Textbooks, worksheets, and even lectures are now often full of illustrations. Illustrations help learners form connections between the target language and the learner's experience which enhances acquisition and usage (Canning-Wilson, 1999). Sketching, which is quickly drawing simple images with thick lines in order to illustrate an idea or object, may be a valuable tool in the classroom for three reasons: 1) sketching activates the Reticular Activating System (RAS) in the brainstem which increases alertness and retention of information, 2) sketching increases learner agency through active participation, and 3) sketching accommodates a variety of learning styles (Castillo, 2007). This paper has four objectives. 1) Analyze the previously mentioned benefits of sketching. 2) Briefly explore Horsburgh's Four Central Guidelines for Class Illustrations and how teachers can use them to better utilize sketching in the classroom. 3) Offer sketching activities that students can use to better learn vocabulary. 4) Share examples of both student and teacher sketches are well as student feedback.

Keywords

Illustrations, reticular activating system (RAS), sketching

1. Introduction

The saying, "A picture is worth a thousand words," likely has more relevance in our world than ever before. Our world is inundated with visual stimuli that include drawings, photographs, and videos, all in a vast array of colors and movement. This is also true in the classroom. The traditional lecture-based approach to learning has been augmented with various forms of colored images, both digital as well as paper-based. Even the traditional university lecture, once characterized by a person standing at a podium and simply speaking for prolonged periods of time, now requires optical assets that entertain as well as educate.

In the Second Language Acquisition (SLA) classroom, images can significantly increase student learning through the creating of connections between the language being taught and the experience of students doing the studying. While photographs, videos, charts and other visual assets are often created with or taken from a variety of digital platforms, there is one technique that is often overlooked: sketching.

Sketching is the act of illustrating simple objects or ideas in a short amount of time with quick, bold lines. It can enhance language acquisition through the arousal of the Reticular Activating System (RAS), the encouragement of greater participation and learner agency, and the bridging of various learning styles. Even more beneficial is that sketching can accomplish these with little-to-no effort or cost.

Unfortunately, most teachers are hesitant to label themselves as "artistic" and, therefore, are likely to avoid sketching in class. For these people, there is good news; the "worse" a sketch may appear, the more likely it will be effective in facilitating language acquisition!

2. The Reticular Activating System (RAS) and Sketching

2.1 The "Traffic Light" of the Brain

Have you ever been involved in an automobile accident or some other equally extraordinary event in which movement seemed to be occurring in slow motion while your senses seemed to sharpen? If so, you were likely experiencing how your Reticular Activating System (RAS) regulates, monitors, and adjusts to stimuli (Arguinchona, J. H., 2025).

The Reticular Activating System (RAS) is a network of neurons and nuclei found in the brainstem that serves as the brain's "traffic light" for sensory information and the brain's response to it.

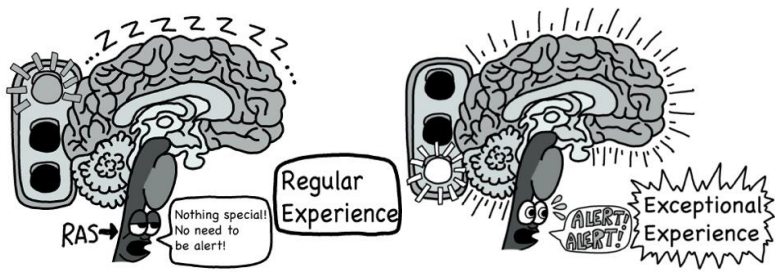


Figure 1. The RAS: The Traffic Light of the Brain (Olson, 2025)

Routine experiences and information are given a yellow or a red light that signifies a low priority, thus telling the brain that a minimum of energy is required, while exceptional circumstances are given a green light which alerts the brain to use its resources to the fullest extent. Simply stated, the more active the RAS, the more learning is likely to occur.

2.2 Sketching Activates the RAS

In the SLA classroom, sketching has the potential to stimulate the RAS for three reasons.

The first is that students will wonder what the teacher is drawing. The result of a sketch, regardless of the level of artistic ability, is more difficult to predict from a few strokes of the pen or chalk than a recognizing a word from the writing of a few letters. For this reason, the RAS will be more engaged and focused on the image being drawn on the chalkboard. As for the previously mentioned "worse" sketches, a hand-drawn image that might be rated as "poor" can significantly increase student concentration as it requires more effort to understand what the image represents and to make connections to personal experiences. "The pedestrian" is an example of this that will be discussed later in the paper.

The second is sketching increases student participation and learner agency. When a student asks a teacher a question and the teacher's response is simply oral, the process is considerably passive. By contrast, a response accompanied by a sketch requires more involvement on the part of the student.

Consider these two inquiries.

Student: Teacher, what does "recover" mean?

Teacher: It can mean "kaifuku" or "kaishu."

The teacher's response fulfills the request, but the exchange is not active and does not lend itself to further inquiry.

Now look at this exchange and see the possibilities that a sketch could create. It should be noted that each sketch required less than 30 seconds to draw.

Student: Teacher, what does "recover" mean?

Teacher: It can mean "kaifuku" or "kaishu." Look at this illustration.

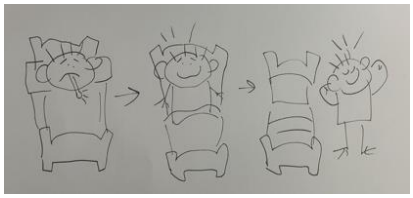


Figure 2. A Sketch Explaining "Kaifuku/Recovering from A Cold" (Olson, 2025)

Teacher: You can see the boy was sick, but he rested and now is feeling much better.

Student: Could "recover" be used for a sports injury?

Teacher: Yes. For example…

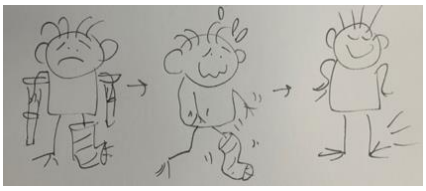


Figure 3. A Sketch Explaining "Kaifuku/Recovering from an Injury" (Olson, 2025)

Teacher: The boy had a broken leg and was using crutches. Over time, he started walking carefully and, finally, recovered from his injury.

Student: Can you give an example of how "recover" would be used as "kaishu"?

Teacher: Like this.

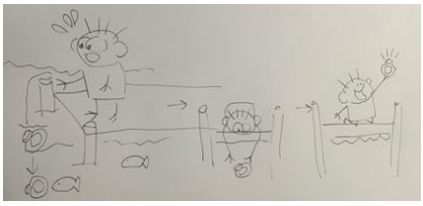


Figure 4. A Sketch Explaining "Kaishu/Recovering an Object" (Olson, 2025)

Teacher: The boy drops his watch in the water. He reaches into the water and grabs the watch.

Student: Can I use "recover" with abstract nouns like "confidence"?

Teacher: Of course. Look at this…

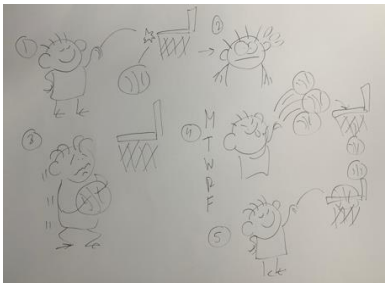


Figure 5. A Sketch Explaining "Kaishu/Recovering Your Confidence" (Olson, 2025)

Teacher: Number 1, the boy is confident. He shoots the ball but he misses. Number 2, he is shocked. Number 3, he has lost his confidence. But, number 4, he practices every day and in number 5, he recovers his confidence.

2.3 The RAS, Sketching and Krashen's Input Hypothesis

Sketches and the accompanying narration can also increase the likelihood students receiving far more comprehensible input in line with Krashen's Input Hypothesis. This theory states that language learners

progress when they encounter and comprehend words and phrases that are slightly above their current level of comprehension. Krashen refers to this as the "i + 1" formula with "i" referring to the learner's current language level and the "+ 1" as the next stage of linguistic input that is just beyond the learner's current level but close enough to be acquired (Krashen, 1992). Sketches can facilitate this process by offering an image that represents the majority of words used. Let's return to this sketch and the narration. *Teacher: The boy drops his watch in the water. He reaches into the water and grabs the watch.*

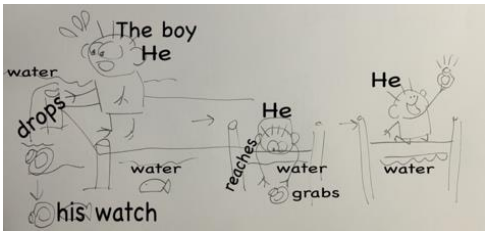


Figure 6. Labeled Objects in the Sketch, "Kaishu/Recovering an Object" (Olson, 2025)

With the exception of "and" and "into," every word in the narration is represented in the sketch which allows learners to form connections between the words they have encountered but may have not acquired. The two objects in the sketch that were not mentioned in the narration, "dock" and "fish," are likely clear enough to spur inquiry should the learner need assistance.

2.4 Story Telling

In addition to the relevance to Krashen's Input Hypothesis, sketching offers further value as each sketch tells a story. Unlike the simple translation of words into one language from another which simply instructs the student, the short tales described in each set of sketches engage the students as the learner forms connections to his or her own experiences. This process brings to mind the famous Chinese proverb, "Tell me and I forget, show me and I remember; involve me and I understand."

2.5 The RAS, Sketching and Learning Styles

The last point regarding sketching and the RAS this paper will make is that sketching accommodates students who learn in different styles. The act of watching someone sketch utilizes both visual (watching the person draw as well as seeing the finished sketch) and auditory (hearing any narration the person offers while sketching) learning styles. Asking the students to make their own sketches adds two often-ignored component to the learning process: the tactile learning style. Learning through movement and through using fine motor skills and the sense of touch is often underutilized in the SLA classroom. Picking up a pencil, drawing an illustration, followed by moving to a different chair and showing and explaining your sketch to another person is an excellent way to increase language acquisition as it employs all four learning styles.

3. Sketching: Theory and Practice

3.1 Horsburgh's Four Central Guidelines for Class Illustrations

Despite its benefits, sketching in class can be daunting. For teachers who wish to start sketching in class, a good place to begin is with Horsburgh's Four Central Guidelines for Class Illustrations (Armstrong, 2023). They are as follows.

1) Sketches are to be symbolic rather than realistic.

2) Sketches focus on the target and not the background.

3) Sketches are drawn with bold, thick lines.

4) Sketches are drawn quickly (no more than 30 seconds).

Let's look at a sketch and how it relates to each of Horsburgh's guidelines.

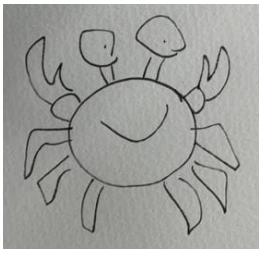


Figure 7. A Sketch of a Crab That Utilizes Horsburgh's Four Central Guidelines (Olson, 2025)

The illustration above is that of a crab and is an example of an effective sketch that conforms to all of Horsburgh's Guidelines. The sketch is symbolic and not realistic; crabs do not smile and the proportions are not accurate. Nevertheless, there should be no doubt that the animal in the sketch is a crab. The sketch focuses on the subject. There is no seabed, seaweed or other objects competing for the learner's attention. The lines of the crab are thick and bold. There is no shading or coloring, nor are there any attempts to edit or alter the lines once they have been drawn. Finally, the sketch was drawn in 10 seconds.

3.2 The Pedestrian

It has been my experience that when teachers are encouraged to use sketching in their classrooms, they often counter with some variation of "I can't draw." This is the point that "the pedestrian," which is the most effective sketch I have personally ever seen, should be mentioned. Here is the sketch reproduced from my memory.

Figure 8. The Pedestrian (Olson, 2025)

The class was taught at a private English conversation school in 1992. The topic for this class of upper elementary students was "transportation." The vocabulary included "car," "bus," and "train," among others. The most contentious word was "pedestrian." Students could not understand the teacher's explanation that, in the context of transportation, a person who walks is referred to as a "pedestrian." Finally, the teacher stood up and walked to the whiteboard and sketched the figure above. In comparison to the other easy-to-understand pictures taken from textbooks and dittos---it would be nearly twenty years before Google Images was available---the "pedestrian" sketch was so bad that it was perfect. After laughing at it, the students were captivated by the frizzy hair, the face's frantic expression, and the "person" in the thought bubble.

Even though the sketch does not completely conform to Horsburgh's Guidelines as there are more details than necessary, the sketch was effective. While some of the details (the cup and the briefcase, for example) could have been distractions, the students related to them as items that people carry while walking in a rush to work. By drawing connections between those items, the harried expression both on the person's face and in the thought bubble ("He must be under stress," opined one student) and their personal experiences with their parents rushing off to the office, the students were able to acquire the use of the word "pedestrian." If that sketch can be an effective teaching tool, then any sketch has the same potential.

3.3 How to Draw "Spike" (Front View)

Now that the "why" of we should sketch has been discussed, let's look at "how" we can sketch. The classic "stick figure" is easy and certainly can be effective, but if you wish to add more movement and emotion to your sketches, please feel free to use my character, Spike. Below is a step-by-step guide on how to draw the front view of Spike.

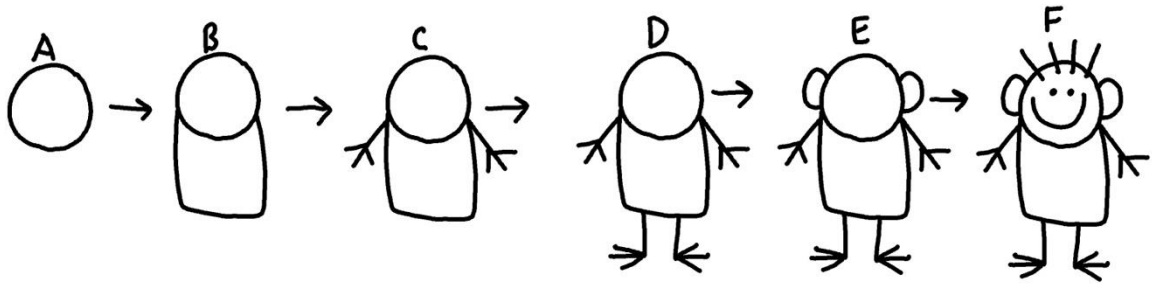


Figure 9. How to Draw the Front View of Spike (Olson, 2025)

In step A, you draw a circle which will become the head and face. In step B, the three sides of a rectangle are connected to the circle/head. This will be the body/torso. In step C, the arms, hands and fingers are created by drawing a long line with two shorter lines jutting out in a 45-degree angle. The legs and feet are created in step D in similar fashion by drawing two long lines and then adding three short lines at the base of each long line. In step E, you add the ears by drawing a half circle on each side of the circle/head you created in step A. Finally, in step F, you add four lines (or more) that will be the hair and draw the face which consists of dots for the eyes and lines for the mouth.

3.4 How to Draw "Spike" (Facial Expressions)

Emotions can be expressed with simple lines and shapes. Here are some examples.

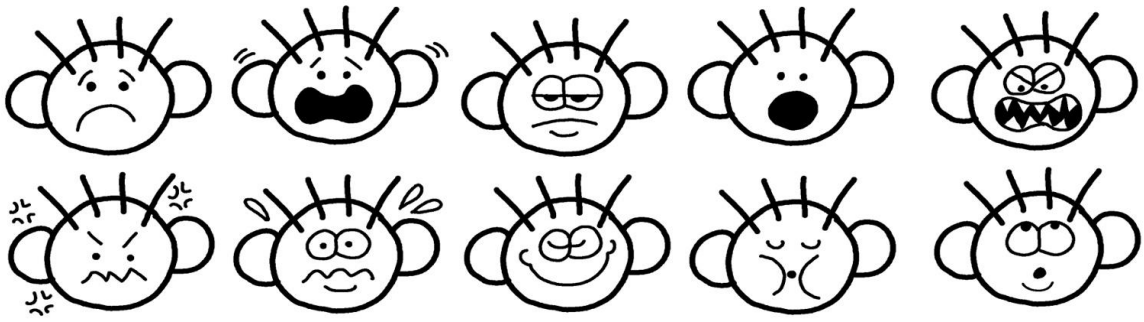


Figure 10. Various Spike Expressions (Olson, 2025)

3.5 How to Draw "Spike" (Side View)

To make a sideview of Spike, begin by drawing a "C" as shown in step A. To form the head, draw another large "C" facing the opposite direction as shown in step B. In step C, you draw the three sides of a rectangle just under the head. In steps D and E, you add the arms, hands and fingers with the legs and feet. Finally, in step F, the single eye and hair are added.

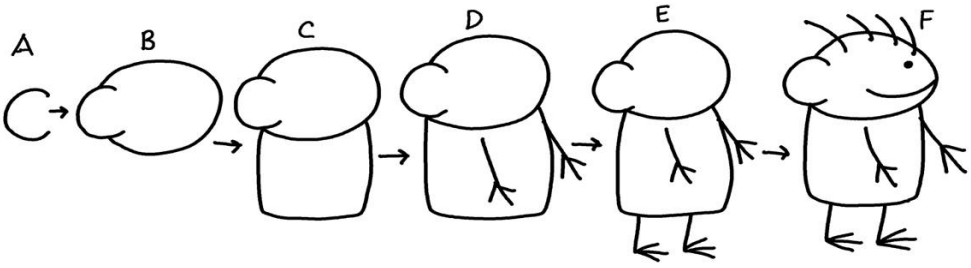


Figure 11. How to Draw the Side View of Spike (Olson, 2025)

3.6 How to Draw "Spike" (45-Degree Angle View)

To make Spike facing at a 45-degree angle, first draw a "C" as shown in step A. To form the head, draw another large "C" facing the opposite direction as shown in step B. To complete the head, draw a final half circle that is connected to the far side of the large "C" as shown in figure C. In step D, you draw the three sides of a rectangle just under the head. In steps E and F, you add the arms, hands and fingers with the legs and feet. In step G, you draw the hair and the face.

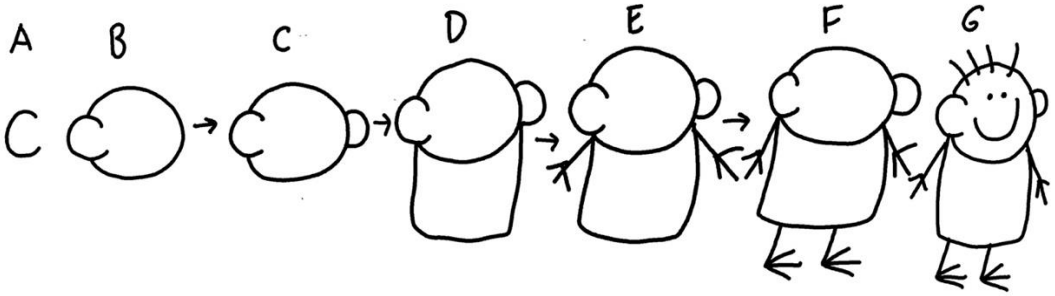


Figure 12. How to Draw Spike at a 45-Degree Angle (Olson, 2025)

Spike is quite flexible and can be used to illustrate a variety of actions and situations. Here are some examples.

Figure 13. Various Verb Illustrations Using Spike (Olson, 2025)

Spike is copyrighted but can be used for non-commercial purposes such as education. Feel free to use him in your classroom but don't be afraid to create your own characters and develop your own style. Pick up that chalk or pencil and sketch away!

3.7 Sketching Activities for an SLA Classroom

Describing a Scene

One student verbally describes a scenario from a photograph or an illustration to another student who illustrates the scene. The students then compare the photograph with the illustration and discuss as necessary. For example: "The student was happy after he ate ice cream." Here is one sketch that came from that activity.

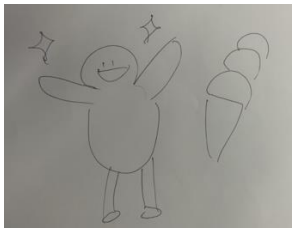


Figure 14. A Student's Sketch Representing "The Student Was Happy after He Ate Ice Cream" (Olson, 2025)

Pictionary

A pair or group of students are given a list of words and/or phrases. One student draws pictures until one of the other students can guess the word or phrase that is being illustrated. For example: As soon as possible.

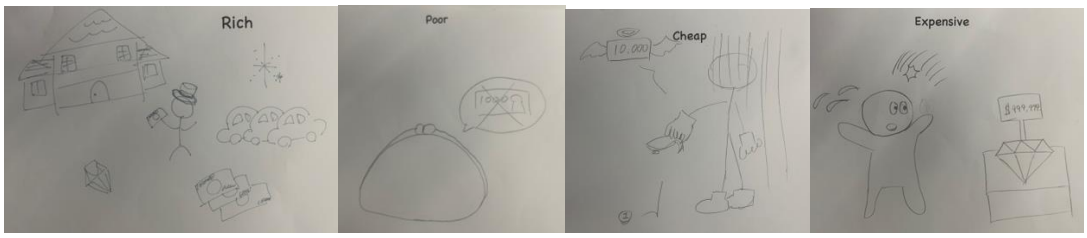
Here is one example.

Figure 15. A Student's Sketch Representing "As Soon As Possible" (Olson, 2025)

Personalized Picture Dictionary

In lieu of homework, give the students a list of words or phrases that they must illustrate before the next class. At the next class, have students exchange and discuss their sketches. For example: rich, poor, cheap, expensive.

Here is one sketch from each example.



Figures 16-19. Student Sketches Representing "Rich," "Poor," "Cheap," and "Expensive" (Olson, 2025)

Slap/カルタ

Be sure to keep copies of your students' sketches because you should have enough illustrations to make a slap/カルタ set that will be both a fun game as well as an effective tool for review. Give students sets of student-made illustrations and then play this traditional Japanese card game.

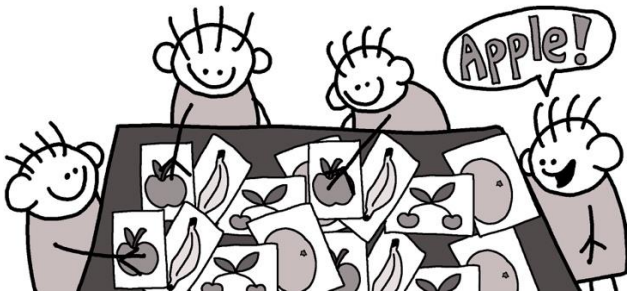


Figure 20. The Japanese Card Game "Slap/カルタ" (Olson, 2025)

4. Why Not Just Use AI?

4.1 The Issue of Time

While AI is an amazing tool, there are a few reasons why sketching may be a better option. A sketch should take no longer than 30 seconds. Searching an online data base or using an image-generating platform to create a visual asset for a word or phrase will likely take longer depending on the length of time that is needed open the app and find an acceptable image…and that is assuming the wi-fi connection is strong! Sketching avoids the issue of time.

4.2 Passive versus Active

Waiting for AI to generate an image is a passive activity that does not engage the RAS. The same can be said for scrolling through Google Images. Sketching or even watching a sketch come to life activates the RAS and engages the student.

4.3 Compliance, Accuracy and Possibly Offensive Content

There is a risk that your image will not be processed. Using an image-generating platform requires that the "prompt" (the description of the visual asset to be created) conforms to the "standards and policies"

of that platform so as to not create any images that may be "offensive." It has been my experience with AI that "offensive" is a vague term that lacks consistency. While experimenting with AI to create classroom assets, I have often waited for a long period of time for an image to be generated only to be told that my request "violates company standards" and no image will be provided. An example of such a prompt, followed by a hand-drawn illustration of the image I wanted to create, and the notice of noncompliance follows.

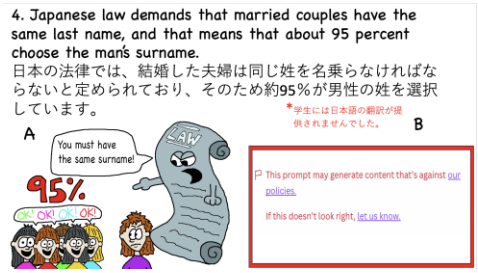


Figure 21. The Above Prompt (4) Was Illustrated (A) But AI Responded With a "Noncompliance" Notice (B) (Olson, 2025)

Online materials can be inaccurate or even offensive. When one asks Google Images for a photograph or an illustration or types a prompt into an image-generating platform, anything can appear. There have been numerous incidents of teachers inadvertently uploading images, AI-generated or otherwise, that were inaccurate, offensive or, in some cases, both.

Two such image depict a "diverse" portrayal of Catholic popes, one as a woman and another as a man of color. It was created by a large, multinational technological corporation as part of a Diversity, Inclusion and Equity (DEI) initiative (Shamin, 2024). Despite the attempt at "diversity," the image offended people who resented the inaccuracies of each image (never has a person of color nor a female served as a pope) while others claimed the illustrations were condescending. These images can, intentionally or otherwise, promote racial and cultural biases (Hee-Jong, 1998). Sketching avoids this problem.

4.4 Student Preference

Finally, students appear to appreciate hand-drawn illustrations and sketches over AI-generated materials (Olson, 2025). I conducted a small-scale survey in which I asked my college students to compare numerous visual assets that were illustrated for our current textbook with images that were AI-generated. The hand-drawn illustrations and AI-generated images were separated into three categories: 1) illustrations for the reading passage, 2) illustrations for verbs and, 3) illustrations for adjectives. The letter "A" refers to the hand-drawn illustrations while "B" refers to the image or response created by AI platforms. The students were asked to respond through the messaging app LINE, and to use the following answer key.

A: I prefer the hand-drawn image. A: 手描き画像の方が好きです。

B: I prefer the AI-generated image. B: AI 生成画像の方が好きです。

C: I have no preference. C: 特に好みはありません。

Here are some examples of hand-drawn illustrations and their AI-generated equivalent for reading passages.

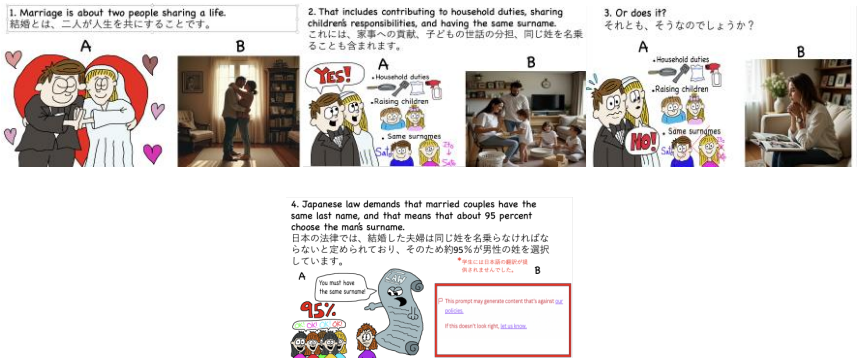


Figure 22. Hand-drawn Illustrations (A) and AI-generated Images (B) for a Reading Passage (Olson, 2025)

Here are some of the “verb” images. Here are some of the “adjective” images.

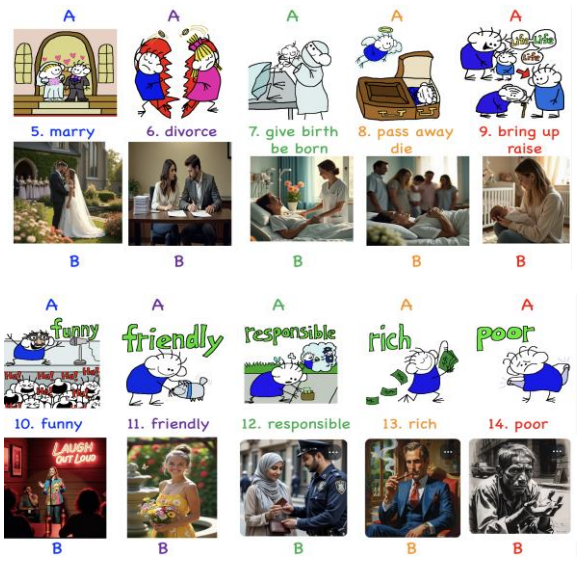


Figure 23. Hand-Drawn Illustrations (A) and AI-Generated Images (B) for Verbs and Adjectives (Olson, 2025)

87 students were asked to participate in this study with 31 responding. All 31 of the respondents preferred the hand-drawn illustrations to the AI-generated images. Student comments included, "The hand-drawn illustrations are cute," "I can better understand the hand-drawn illustrations," "The hand-drawn illustrations (from the passage) tell a story," and "The AI-generated images are stiff."

This research project has numerous flaws. The most obvious is the small sample of 31 students. The second flaw is that the students know the illustrator and that, combined with the Japanese propensity for courtesy, likely influenced the students' choice of hand-drawn illustrations. Additionally, the main author is not proficient at using AI and had no previous experience in making the "prompts" necessary for the image generator to create the necessary image. Finally, the main author admits to having a bias against AI due to the perception that AI is in direct competition with illustrators. All of these flaws must be taken in to consideration when reviewing the results.

5. Conclusion

In this digital world where our eyes are at least as important as our ears, illustrations may be more beneficial than ever to both engage students and increase their language acquisition. While there exists a wealth of digital and online resources for teachers to access and use to create visual aids, sketching appears to be an effective tool in the SLA classroom. Sketching activates the RAS which increases concentration and the likelihood of retention, engages all learning styles, increases participation and does so quickly without the needs for extra training, equipment or money. All sketching requires is that teachers (and students!) are willing to pick up a piece of chalk or a pencil and starting drawing.

References

Arguinchona, J. H., & Tadi, P. (2025). Neuroanatomy, Reticular Activating System. [Updated 2023 Jul 24]. In *StatPearls [Internet]*. *Treasure Island (FL): StatPearls Publishing*.

Armstrong, Craig. (2023). *Sketches vs. Photos: Which Improves Engagement and Vocabulary Retention More?* Presented at the 2023 JALT PanSig in Kyoto Sangyou University.

Canning-Wilson, Christine. (1999). *Using Pictures in EFL and ESL Classrooms*. Presented at the Current Trends in English Language Testing Conference (Abu Dhabi, United Arab Emirates, June 1999).

Castillo, M. (2007). Drawing in the ELT classroom. *Association national Universitaria de Profesores de Ingles, AC*.

Ihm, Hee-Jeong. (1996). *A study of the cultural content of illustrations in selected elementary school EFL/ESL textbooks*. University of Georgia.

Krashen, S. (1992). The input hypothesis: An update. *Linguistics and language pedagogy: The state of the art*, *12*(3), 409-431.

Olson, R. (2025). *AI-generated illustrations: Hero or Villain?* Proceedings of the 74th Tohoku-Hokkaido Region Higher Education Research Conference.

Olson, R. (2025). Figures 1-23. *Research data*. Created by Robert Olson, 2025.

Shamin, S. (2024). Why Google's AI tool was slammed for showing images of people of colour. *Al Jazeera*.