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Foreword

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In April of 2025, the Yokohama Chapter of JALT met at Keio University's Hiyoshi Campus to hold its regular My Share event. Here four of the presenters share their ideas in greater detail and with more theoretical backing.

Interested in bringing Bloom's Taxonomy into your language classes, but not sure where to start? Nicole Ballard helps out with a clear lesson sequence to introduce critical thinking, which can be adapted to a wide range of teaching contexts.

Convinced of the value of reading fluency activities but put off by the isolated design and lack of communicative purpose? Andrew Devitt shows how speed reading courses can be extended to make them communicative and increase learner motivation.

Looking for ways to generate teacher reflection projects for grassroots professional development? Prentice et al. demonstrate a way to do just that by outlining an approach to choosing and running a task. They share their narrative reflections on 10-minute writing tasks to exemplify the approach.

Tired of seeing students stumped by trying to translate the Japanese *sen*, *man*, *oku*, system and other large numbers into English? John Shaw outlines the causes of the problems and gives tips and techniques for dealing with them practically in the classroom.

As ever, many thanks to the authors of these papers for their contribution to the My Share event last April, and for all of the time and effort put in, not only in writing their own papers, but in collaborating with each other through the review process. Thanks also to the YoJALT team for their hard work in making My Share events an ongoing success.

To participate in Yokohama JALT events, or learn about the Chapter, visit our webpage https://jalt.org/groups/chapters/yokohama, or Facebook https://www.facebook.com/YoJALT

Sincerely,

Alexander L. Selman
Editor, *Yokohama JALT My Share April 2025 Special Issue*

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An Activity to Introduce Critical Thinking

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ABSTRACT

This paper presents an engaging classroom activity designed to develop critical thinking skills through visual analysis of a humorous image. Structured on Bloom's Taxonomy, the activity guides students through the six steps of the taxonomy from basic knowledge through to evaluation. The activity can easily be adapted to a diverse group of learners and instruction methods. This activity demonstrates how simple images can serve as tools for developing critical thinking skills in an accessible and engaging format.

INTRODUCTION

Critical thinking is a significant skill in all aspects of education as it enables students to interpret, analyze, and evaluate information effectively (Facione, 2011). In a modern world filled with media and misinformation, the ability to critically think about information is increasingly crucial. One engaging method to introduce critical thinking to students is through a structured activity where they examine a picture and systematically apply the steps in the critical thinking process. Here, I will introduce an activity I use to introduce the critical thinking process to my Japanese university students where they analyze a picture, in this case a cute dog in a pumpkin hat, and progress through the stages of Bloom's Taxonomy (Bloom et al., 1956) to develop their skills. By moving through each stage from the basics to more complex evaluation, students learn to take their time and understand how they process information.

BACKGROUND

Ennis (2001), defines critical thinking as "reasonable reflective thinking focused on deciding what to believe or do" (10). The importance of critical thinking has been recognized for centuries. Socrates is often recognized as the father of critical thinking, though it was more formally developed in the 20th century through philosophers such as John Dewey (Anderson & Krathwohl, 2001). Bloom's Taxonomy, first introduced by Bloom in 1956 and later revised by Anderson and Krathwohl, provides a framework for categorizing critical thinking into cognitive skills that starts with lower-order thinking, then moves on to higher-order skills (Anderson & Krathwohl, 2001).

Table 1
Bloom's Taxonomy: Original & Revised Versions

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Original Version	Revised Version
1. Knowledge (recalling information)	1. Remember
2. Comprehension (understanding information)	2. Understand
3. Application (using information)	3. Apply
4. Analysis (breaking down information)	4. Analyze
5. Synthesis (combining elements of information)	5. Evaluate
6. Evaluation (judging information)	6. Create

Anderson and Krathwohl's revised version changes some of the language and utilizes verb forms, but I thought the older version was easier to understand and use in this activity as the new version ends with creating after evaluation and my end goal was solely evaluation. By using this framework, students move through structured steps using both lower and higher order thinking skills to sharpen their own critical thinking skills.

CONSIDERATIONS

Choice of Photo

The main consideration for this activity is which image to use. When I do this activity, I use a PowerPoint presentation to introduce the concepts and move students through each step. However, this may not be an option in all circumstances. It is also possible to move through each stage with a worksheet and printout, but the picture chosen for a black and white printed worksheet would differ from one chosen for a PowerPoint presentation. The picture also needs to take cultural relevance and cognitive level into consideration. The first photo I use shows a dog in a pumpkin hat near a pool. University level students often have enough exposure to foreign media to know that the home pool in the image likely places the picture in North America, but many younger students would not have the knowledge needed to make that evaluation. The second photo I use changes, but most recently I used one of elementary students using viewing boxes to see an eclipse from 1979. This picture has far more cultural context than the first picture and works better with older or more international classes. In some instances, ownership and usage rights of the pictures may also be a factor that presenters need to consider. I specifically chose a silly picture from social media for my first picture, so it could not be included in a publication without a great deal of effort. However, using pictures from the internet is more authentic than a presenter creating their own pictures, though that may be necessary for some.

Differentiation

The other consideration is how to go through the steps in class. Younger students will likely need more time for observation and description sections of the activity than older students, and quiet or shy classes may need to have time to discuss each question in groups before answering. My standard method for this activity is to introduce each level of the taxonomy and explain the meaning, such as showing the Knowledge slide with questions such as "Who?" "What?" "Where?". I then show the picture of the dog and ask students the relevant question and let them discuss in groups before asking them to yell out answers, though in some classes I need to call on groups or individual students to get responses. This activity could be made into a worksheet or an online interactive activity easily as well.

PROCEDURE

The setup I use for this activity is a PowerPoint presentation which first introduces each step of Bloom's Taxonomy and the associated questions before going through each section individually with the chosen picture.

In the Knowledge step I ask them to answer the basic questions of "What? Where? When?" which are also displayed on the slide. I then solicit answers such as 'dog', 'hat', 'tongue', 'pool' and 'daytime'. I write these words on the board as they are given. When writing, I leave enough space between the words to facilitate the lines in the next stage.

For the Comprehension step I then draw a line between two of the words and ask the students to make a sentence on how they are connected. For example, I may draw a line between "dog" and "hat" in order to solicit "the dog is wearing a hat". Depending on the level and speed of the class, I may do only two or three line sentences, or may ask them to make sentences for all of the lines in groups. Occasionally students will mention very specific parts of the picture in the Knowledge step that are less useful for this stage, in which case I will concentrate on just doing the major connections.

Once connections have been made between the concepts, we move on to the Application stage where I usually start by asking them about the hat. What does the hat look like? Sometimes the students will guess 'carrot', but they often arrive at the answer of 'pumpkin' very quickly. I then ask about the pool and where it looks like it might be. This step can sometimes require a bit of prompting depending on the class. I will ask them if this looks like a pool they have been to, where might have a pool that looks like this, etc. Outdoor pools are most common in schools in Japan, and are fairly rare outside of that context. As the pool in the picture is obviously not a school pool, I ask them where they may have seen a pool like this which usually prompts students to mention Hollywood movies. For my university level students, this is a relatively easy connection to make, but this is one of the reasons the picture would be less appropriate for younger students I have worked with.

For the Analysis step I usually focus on the hat at first, asking students how pumpkins, costumes (if elicited previously), and America could be connected. Many students are aware that Halloween is particularly popular in the US so this step is usually very quick. I will also ask them who they think took the picture to bring the dog's owner into the scenario.

At the synthesis stage I ask them when they think the picture was taken, who dressed the dog up, and why the picture was taken. At this stage I just ask the students direct questions to elicit answers, usually which are not in the form of sentences.

Finally, for Evaluation I have the students put all of this information into one or two sentences to describe what is happening in the picture. The example answer I have on the slideshow was "This dog has been dressed up like a pumpkin by its owner for Halloween. The owner posted the picture on social media because the dog looks silly and cute." This allows the students to understand the scope of what I am asking for the activity. Some students may be more focused on guessing what happens next in the picture, or making up a story, so I try to emphasize that I want them to realistically evaluate the picture and tell me only what is likely to be true.

After the students have completed the introduction, I write out the stages of the taxonomy on the board. It may be more effective to give them a worksheet at this stage, but I try to limit my printing, so I have not done so. I then show them a second picture, asking them to go through the steps in their groups. The second picture is where the students are actually asked to go through the steps, so there should be some level of difficulty to it unlike the image used to explain the ideas which is primarily just to help students identify the steps

their brains went through when first seeing the image. The exact image chosen will depend on the context of the classroom and the level of difficulty desired. There needs to be some awareness of what students will and will not be familiar with in order to be sure that there are aspects of the image that they can identify but there are also aspects that will require them to make inferences based on the pieces they do know.

CONCLUSION

This activity shows that even simple light-hearted images can serve as effective tools for developing critical thinking skills. By applying Bloom's Taxonomy to the analysis, students' progress through the steps from basic observation to complex evaluation, experiencing the full spectrum of cognitive processing in distinct stages. The activity's flexibility allows it to be adapted to a variety of classes and classroom situations, while the engaging nature maintains student interest through what could otherwise be a semi-abstract cognitive exercise. The key strengths of this approach to introducing critical thinking are the ability to make the steps tangible and easy for students to understand. The structured progression means learners of any level can participate while still being challenged to develop their skills. It mainly serves to show that critical thinking development can be fun, engaging, and accessible.

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A Communicative Approach to Speed Reading for Learner Motivation

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ABSTRACT

Speed reading is widely recognised as a valuable method for improving reading fluency, yet learners often resist tasks that prioritise speed over detailed comprehension. This article presents a classroom-based adaptation of traditional speed reading activities by introducing a communicative, student-led checking stage and class feedback. By pairing timed reading with collaborative answer discussion, students are encouraged to balance speed and comprehension, engage with the text socially, and take ownership of their learning. This extension activity addresses common challenges, including mixed-level classes, reluctant readers, and learners focused on perfection. In addition to improved fluency, classroom observations of the approach demonstrate that small, communicative modifications to standard speed reading routines can significantly enhance learner engagement, making fluency practice both effective and enjoyable.

INTRODUCTION

Reading fluency is an essential component of language competence, particularly for academic students and learners preparing for exams such as the IELTS, where timed reading tasks pose a challenge. While vocabulary and comprehension strategies are often prioritised in EFL and ESL classes, reading fluency, the improvement of speed and reduction of habits that slow our reading, can be a key factor in student success.

Speed reading programs, such as *Asian and Pacific Speed Readings for ESL Learners* (1000+) by Quinn et al. (2007), offer structured timed reading and immediate feedback to improve fluency. According to Nation (2005), speed reading should be treated as an isolated fluency activity: learners read a short passage with controlled vocabulary, answer comprehension questions from memory, and check their responses. A target comprehension of approximately 70% indicates optimal speed, while higher or lower scores signal the need for adjustment.

In exam-focused contexts, motivation for speed reading is unlikely to be an issue as students see the benefits of improving their reading speed. In general or academic English courses, I have found that many learners resist reading activities that reduce detailed comprehension and they may deliberately read slowly, reread sections, or search for answers, hindering their fluency progress. To address these challenges, I have added peer-checking

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and discussion stages to the speed reading routine. This addition promotes engagement, helps learners tolerate ambiguity, and reinforces the idea that understanding every word is not always necessary.

This article outlines a classroom-based approach to implementing speed reading that maintains motivation and promotes engagement. I describe how a routine activity was adapted to become interactive and communicative, improving both student enjoyment and confidence.

BACKGROUND

Reading Fluency

To be considered a fluent reader of a language, we must be able to comprehend what we are reading as we read. This is true for native and non-native users of languages, but for learners of second or foreign languages, the speed at which they are able to read and comprehend the text is also considered to be an important indicator of reading fluency (Nation, 2005). According to Nation, skilled readers of English are capable of reading between 250 and 300 words per minute under normal reading circumstances where the reader's eyes will fixate on most of the words as they read. Faster reading speeds of 400 words per minute or higher indicate that the reader is no longer fixating on a majority of the words and is likely skimming or scanning a text, which will reduce their comprehension level (Nation, 2005). A slow reader, whether native or non-native, is likely to make more or longer fixations on words or parts of words, and to have more regressions where they re-read parts of the text again. Nation suggests that the ability to read faster will help language learners to reduce the number and length of fixations and help them to spend less time reading parts of the text again.

Speed Reading Courses

The speed reading courses I use are available on the Victoria University of Wellington (n.d.), School of Linguistics and Applied Language Studies website. Most of the resources available on the page were produced by Sonia Millett, with the exception of the Asian and Pacific Speed Readings for ESL Learners, which was authored by Quinn, Nation and Millett, and is based on earlier materials by Quinn and Nation. The courses each contain 20 reading texts with accompanying comprehension questions for each, and are differentiated by topic, text length, and word level. Nation's research has shown that key factors in a speed reading course are that the texts in the course are of a uniform length, the vocabulary and grammar is understood by the learner, and the topic should not be too difficult (Nation, 2005). All of the courses have a word level which indicates the difficulty of the texts. For example, the Asian and Pacific Speed Readings for ESL Learners (1000+) is a collection of 20 texts all written to be 550 words in length and written using the 1000 most common words in English listed in the British National Corpus (BNC).

Implementing Speed Reading

Quinn et al. (2007) suggest in their published materials that a speed reading course proceeds as follows. The teacher prepares a method for the students to check their time such as a stopwatch counting up in minutes and seconds displayed on a TV or projector screen. At the teacher's command, the students will all begin silent reading and the teacher will start the

stopwatch. The students read the text as quickly as they are able to, and as each student reaches the end, they check the time displayed and note it on their page. Following this, they turn over the page and answer the comprehension questions from memory. Finally, they may take out their answer sheets and check their comprehension score before they record their reading speed and comprehension score on a tracking graph supplied with the speed reading course and the activity is concluded. I will discuss the changes that I make to this sequence for my extension activity in a later section.

Common Problems in Learner Contexts

Before beginning a speed reading course, I conduct a short reading habits survey to gauge students' general attitudes toward reading. Commonly, a number of students report a dislike of reading or describe very limited reading habits, such as only engaging with Japanese manga, social media, or set classroom texts. For these learners, improving speed alone offers little intrinsic motivation. Similarly, students who are reluctant to read denser texts often require additional incentive. In both cases, incorporating a fun, communicative follow-up activity has helped turn reluctant readers into more enthusiastic participants, both in my classes and in those of colleagues who have adopted similar practices.

Classroom observations also reveal another group of learners: those who approach the task with a focus on accuracy rather than speed. These students often read slowly, reread sections, take notes, or search for comprehension question answers directly in the text; proudly achieving a perfect score while missing the purpose of the activity. Despite repeated explanations that around 70% comprehension is the target, they resist adjusting their habits and as a result show little, or slow, progress in fluency.

While continued explanation of the task and active encouragement is one solution with both of these student types, I have found it more effective to build motivation by adapting the task design. I set strict time limits, monitor closely to discourage answer-searching, and most importantly, introduce a peer-checking stage where pairs must justify their answers collaboratively. This prevents slower readers from extending their time and requires them to engage with the text through discussion. Once they realise they cannot achieve a perfect score by reading slowly or searching during the answer stage, they adapt by reading more quickly during the initial timed phase. In this way, the communicative stage not only addresses motivational challenges but also naturally encourages the intended balance between speed and comprehension.

EXTENSION ACTIVITY

Communicative Answer Checking

To implement the pair checking stage in my classes, I alter the advised sequence described above in Implementing Speed Reading. Before the reading begins, I instruct my students to stop and relax after they answer the questions until I end the task, and my students do not receive copies of the answers. The next stage works best if they do not read again or keep studying the questions while they wait. Additionally, I regularly reduce the time allotted to the reading and comprehension questions to maintain a sense of time pressure as the students' speeds increase.

In my classes, the peer-checking stage is often the most engaging and rewarding for both students and teachers as it transforms what was previously a passive, teacher-led review into an interactive, student-centred learning opportunity. This stage begins with teacher

modelling. I demonstrate how to answer the first question collaboratively, instructing students to work together to find each multiple choice answer in the text.

Firstly, both students in a pair must focus on the same question at the same time. They should not skip ahead but instead maintain dialogue, ask questions, and share interpretations. After they compare answers, they quickly search the text together. Once the correct answer is located, they must underline the relevant part of the text and label it clearly with the question number. This strategy is borrowed from IELTS exam preparation techniques that I learnt in training and serves several purposes. It draws attention to paraphrasing and synonym use, helping students develop an awareness of how meaning is conveyed in different ways. It also encourages peer teaching, as students explain their reasoning and language understanding to one another. Throughout this stage, I circulate to offer support, answer questions, and provide clarification as needed. The activity concludes when most, or all, student pairs have finished checking their answers and underlined the relevant parts of the text.

Students who were unable to complete the reading or comprehension questions, whether due to slower reading speed or late arrival, are encouraged to skim and scan the text with their partner. They are not permitted extra time to complete the original speed reading task. This approach has had a noticeable impact on motivation, particularly in encouraging punctuality as I use speed readings as a class warmer, and greater focus during the reading phase.

Class Feedback and Consolidation

In the final stage, a volunteer pair writes the agreed answers on the board. Students are then invited to raise any objections or discuss alternative responses. My involvement is minimal unless the class is unable to reach consensus, or requires clarification on a complex point. This student-led review fosters greater autonomy, critical thinking, and a collaborative classroom atmosphere. Once the answers have been confirmed, students record their comprehension scores alongside their reading times. The speed reading activity is then concluded.

TEACHER OBSERVATIONS

Impact on Fluency Level

During the first two weeks of implementing speed reading activities in a general English class, I followed the recommendations outlined in Quinn et al., and Sonia Millett's course materials. As I expected, based on my observations from years of using speed reading in IELTS Preparation Courses, some students demonstrated gradual improvement in their reading speed, while others, particularly those who were more analytical or detail-oriented, showed little or no progress. These students were often reluctant to engage fully with a reading task that did not prioritise complete comprehension. During the answer-checking stage, the same few students would consistently ask for answer clarification or detailed explanations of the answers they got wrong.

By introducing the peer checking stage, and giving the class the opportunity to discuss the meaning and language of the text together, students who had previously resisted the idea of reading without full understanding gradually began to relax. Once they recognised that a more detailed examination of the text would follow the timed reading stage, they became more willing to prioritise speed and memory recall in the initial phase. Their improved willingness to guess answers and tolerate ambiguity reflected a positive shift toward fluency-

oriented reading and faster reading speeds.

Learner Motivation and Autonomy

The introduction of the answer-checking stage also marked a significant shift in classroom dynamics. After implementing it, I observed several changes in learner behaviour and attitudes that indicated increased motivation and deeper engagement with the activity. Firstly, the communicative checking phase fostered an energetic and collaborative classroom environment. Once familiar with the process, students actively helped one another, discussed their reasoning, and took pride in identifying and proving the location of correct answers within the text. This peer-led discussion promoted not only language awareness but also a sense of ownership over their learning. The public display of answers and the requirement to justify them gave learners a visible sense of accomplishment.

Secondly, students who had previously arrived late began to adjust their behaviour. Missing this interactive component of the activity became a deterrent, and punctuality improved. Students began to view the speed reading activity as something worth arriving on time for, rather than a routine task that could be joined halfway through.

Most significantly, the techniques introduced during speed reading began to transfer to other classroom tasks. Students independently applied pair-checking strategies now regularly practiced in their speed reading checks to unrelated reading exercises, and adopted a more active approach to textual analysis. Several learners reported greater success in reading sections of exams, noting improvements in both speed and comprehension. Others expressed a renewed interest in personal reading, reporting that they felt more confident when approaching longer or more complex texts.

CONCLUSION

Speed reading provides a structured and research-informed method for improving reading fluency in language learners. However, in practice, some learners may resist tasks that prioritise speed over detailed understanding, particularly in exam-focused contexts. The modifications presented in this article, especially the introduction of a communicative, student-led checking phase, have helped bridge this gap by integrating comprehension, collaboration, and reflection into the speed reading cycle.

These changes have had a positive impact on learner motivation, participation, and overall classroom engagement. By shifting from a teacher-led to a student-led checking process, students became more invested in both the activity and their own learning outcomes. The approach also encouraged peer teaching, increased punctuality, and promoted transfer of reading strategies to other academic and personal reading tasks.

For teachers seeking to develop their learners' reading fluency while maintaining a focus on comprehension and learner autonomy, this adapted approach offers a flexible, low-preparation option that can be easily integrated into regular classroom practice. It aligns well with the principles of communicative language teaching and can be particularly effective in exam preparation contexts where both speed and understanding are essential.

Future research might explore how these adaptations affect reading fluency over a longer period or investigate learner perceptions in greater detail. Nonetheless, the classroom evidence suggests that a communicative and collaborative speed reading routine can be a powerful tool for increasing not only reading speed but also learner confidence and engagement.

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Teachers Reflecting on a Language Learning Experience: 10-Minute Writing

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ABSTRACT

This article shares a professional development activity to help teachers draw on their personal language learning experience to generate ideas for reflective practice and research projects. Some background and rationale for the approach is given, and a worksheet is shared to guide teachers through the process independently or in small groups. The three authors have each contributed an example narrative summary following the frame suggested by the worksheet, focusing in this article on 10-minute writing activities.

INTRODUCTION

The aim of this article is to describe a professional development activity for language teachers to use, either as individuals or as part of a faculty development programme. Participants reflect on a new personal language learning experience in order to generate research topics or to inform a reflective practice cycle. A worksheet has been made to guide teachers through a connected reflection on learning and teaching, while avoiding some barriers that can prevent them from effectively drawing on those experiences. These barriers have been described previously (Prentice, 2011), but to summarise, they are:

1. *Lack of recent learning experiences*
2. *Lack of time and resources* needed to replicate complex experiences
3. *Lack of similarity* between teacher and student language learning experiences
4. *Lack of deliberate reflection* on the learning experience

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5. *Lack of action* in response to any insights that do emerge from reflection

For example, the guided "Unknown Language Experience" commonly used in pre-service language teacher training courses is typically a very short true-beginner introductory conversation class *(barrier 3)*. These require significantly more in terms of preparation and participation than is common for in-service professional development activities *(barrier 2)*. In contrast, both informal autobiographical narratives and formal retrospective studies of teacher language learning (e.g. Ellis, 2016) often focus on learning experiences far in the past *(barrier 1).* The narratives rarely mention any deliberate connection being made between the learning experiences described and current teaching practice *(barrier 4),* perhaps due to the "compartmentalisation" of teacher and student selves described by McDonough (2002). Even rarer are accounts of plans to change or investigate practice based on any connections that *are* made *(barrier 5).*

As such, the worksheet described here aims to avoid these barriers. It starts by leading teachers through listing the activities they ask their students to do, and then choosing one to reflect on as a learner: either one they have never done as a learner, one they have not done in a long time, or one they are doing but have never reflected on deliberately. The tasks involved should not take too much to complete in terms of time and energy. Where possible, the teachers should use their own materials and follow the same instructions they give when introducing the activity to students. If feasible, it should be something they can do at a similar language ability level as at least some of their students. They are then guided to deliberately reflect on the experience to decide whether they might want to plan a change in the way they teach this activity. Finally there is an optional follow-up stage in which that plan can be completed, acted on and the results observed, before they reflect again on how it went.

The Learning Activity: 10-minute Writing

As will be described below, participants met as a group and chose to all try the same activity as learners, in this case *10-minute writing*. Before going further it is necessary to clarify what this means, as there are various related terms (e.g. *quick-writing, freewriting, timed writing*) used to accomplish a range of writing goals. In this case, participants shared a broadly similar set of materials and approach: they each asked their students to choose from a list of provided writing prompts, think for a short time, then write as much as possible without stopping for 10 minutes. This activity is often associated with the fluency strand of Paul Nation's "four strands" framework, and is recommended in various of his works (e.g. Nation, 2007). Each participant used the activity in slightly different ways, including whether the writing was done for homework or in class, and they give brief descriptions of their version in the results section below.

Note that the aim of this article is not to make definite claims about 10-minute writing itself, or about broader teacher/student cognition. The aim is to develop a process to *generate interesting ideas* for future reflective practice and research projects. A suggested process for those who do take the reflective practice cycle further is available on demand, but is optional. While each teacher did informally report making changes to practice as a result of participation, the analysis of those changes is outside the scope of this article.

METHOD

Materials

The main material is a step-by-step worksheet (see Appendix) that suggests note-taking into a narrative frame while following a process that starts with reflection on learning, then reflection on teaching, then an optional reflective practice cycle (which does not form part of this article). This is an updated version of a worksheet that has been used previously, and the feedback from participants will be used to improve the next version.

Participants

Participants (who are also the co-authors) were recruited from the pool of language-teaching colleagues at Rikkyo University (at the time of the study), whose schedules allowed for a lunchtime meeting, and who were interested in participating in a cooperative teacher development activity. Participants each had varied fluency in a number of languages, and so chose whichever language would be closest to their own students' writing level. Participants 2 and 3 tried the activity as learners only one or two times, whereas participant 1 made it part of their regular learning practice.

RESULTS

This results section contains the three narratives as written by the three authors, based on their own notes, and structured (with adaptation as necessary) from the frame suggested in the worksheet (see Appendix). The aim is to produce a short clear summary that could also be presented at a professional development event or conference, and used to introduce any further work based on it.

Narrative Frame of Participant 1

In my class, I ask my Reading and Writing students to do 10-minute writing. I have done these before as a learner, mainly to model for students, but I had not reflected on the experience deliberately. I followed the same instructions I gave my students (choose a topic from the list, think about vocabulary for a minute, type for 10 minutes without worrying about grammar and spelling). At the same time in class when my students typed theirs in English, I typed mine in French. The following reflections are based on 22 lessons over two semesters. I learned several things from this experience:

- I found that the list of topics was too long and unclear. With only one minute to choose a topic and think of vocabulary, I got lost in all the words and choices. As a result, I realized that in my class perhaps I could update the list of topics by streamlining it, removing some topics, reducing the number of words in each prompt, and grouping the topics under headings such as “easy”, “intermediate” and “challenging”.
- I sometimes did not know what topic to choose. As a result, I realized that in my class, perhaps in the instructions, I could add something about starting with easier topics in weeks 2-5, moving on to more difficult topics in weeks 6-14, and remembering to sprinkle in an easy topic every once in a while to help maintain motivation if the word counts are always going down.

- The instruction worksheet mentions a minimum word limit. It suggests adding on time to hit that word limit. Because I do this activity during class, that instruction is impractical. As a result, I realized that in my class perhaps I would like to remove that rule from the instructions. I need to consult research on the topic to see what the experts recommend about the goal for the number of words, and so on.
- Sometimes, I felt the urge to go back over my writing and make corrections without the pressure of a timer. As a result, I realized that in my class perhaps I need to develop and implement some follow-up activities that allow the students to correct their writing and learn from their mistakes.
- As my word count increased week by week, I started to wonder, what word count I should be aiming for. As a result, I realized that perhaps I need to consult studies to see if there is any data on implementing word count goals.
- I found that I was often wasting my one-minute preparation looking for an appropriate topic and not spending enough time thinking about the vocabulary that I already know about that topic. I am fairly certain my students do as well. As a result, I realized that perhaps on the first day, I will provide the students with a topic and write about it in English with no preparation. Then, I will ask them to write about the same topic in their native language. Finally, I will ask them to write about the same topic in English one more time to compare the difference in word count. Hopefully this activity will help them understand the importance of thinking of vocabulary before writing.

Narrative Frame of Participant 2

In my class, I asked my students to do 10-minute writing once or twice per semester, but it was not systemised, and I was not very clear on the learning benefits of the activity. After allocating time for the choice of the topic from the list, I tell the students to plan their answer for a couple of minutes, and write about their topic of choice for 10 minutes continuously without taking breaks in the middle or worrying about grammar or vocabulary. At the end of the activity, I ask them to share their writing with their partners and exchange feedback. However, I have never done this myself. So, I decided to try it - I typed one in Japanese. I used the same list of topics and followed the same process as my students, except for the peer review part. I learned some things from this experience:

- I assumed that the activity would help me build confidence as a writer, leave me with a feeling of accomplishment, and boost cognitive functions, but I achieved those only partially. One thing I learned from this experience was that the goals should be set early to avoid misunderstanding and unrealistic expectations that can lead to the loss of motivation to write altogether. I realized that my instructions left out the whole part where the students are given such an opportunity. Objectives should be identified and presented to the learners at the beginning of the activity. In addition, each learner can set individual objectives that can be adjusted as the learners progress during the semester.
- I ended up disappointed with the level of my immediately available vocabulary for a timed activity like this, and some of my students probably had a similar experience. I realized that I tend to recycle the vocabulary I am familiar with, and that leads to multiple repetitions and thus dissatisfaction with the outcomes. This issue can be a cause of writers' block and needs a built-in solution to support students' confidence and fluency in writing. I also discovered that vocabulary blockage can be mitigated by providing prompts or target vocabulary - the extent can vary depending on the level of writing proficiency. If the prompts are provided, the responsibility is partly lifted from the learner to serve as a lexical source.

- Similar to Participant 1, a wide array of topics on the list, in my case, served my writing confidence-building goals incorrectly. I realized that if I am given more choices of topics, I tend to spread thin and run out of time because it is wasted on choice-making. Perhaps in the upcoming semester, I might allocate two or three topics per week to choose from, and as already mentioned, I might add some possible suggestions of target language that can even be aligned with the lesson topic and alleviate that feeling of frustration for indecisive learners like myself.

Narrative Frame of Participant 3

I ask all my writing course students to do 10-minute writing for homework. However, I have never done this myself as a learner. So, I decided to try it - I followed my own instructions (choose a topic from a list of prompts, think about it for a minute, write without stopping or correcting grammar/spelling for 10 minutes, then record the word count). I did two of these in Spanish: one handwritten and one typed. I learned several things from this experience:

- I realised it is important to offer students the option of typing, as my handwriting was slow and unreadable. I had just switched in that semester to requiring students to do this activity by hand, to see if it would ease in-class checks and reduce the temptation of AI, but now I will probably go back to offering a choice.
- I realised that my bottleneck for word count was not vocabulary or grammar, it was ideas and my typing/handwriting speed. "Writing around" any unknown grammar and vocab did not feel like it was reducing my word count. If the purpose for doing this activity were creativity or typing practice this would be fine, but I felt like a major goal should be forcing me to get faster at using the language I know receptively, but am slow at producing. At an intermediate level, the topics I chose (daily life object comparison, near future plans) were not doing that. A conditional or past topic might have, but my main concern at the time was just getting a task on my long list of tasks done, and I am sure my students feel the same. Perhaps as intermediate students we would benefit from being required to choose a useful level of "easy" topic. That also made me realise the opposite - that conditional topics would have been too difficult for me in French and probably should not be on a list I give lower levels. I think I need to split my topic lists: one for lower levels so they do not get sandbagged by choosing a linguistically challenging topic, and one for upper levels so they are not just bottlenecked by typing or handwriting speed. A future research project might be an analysis of different kinds of "easy" and its interaction with word count at different ability levels.
- I realised, while writing about choosing mobile phones, that I was sometimes slowed by having to phrase things in a way to avoid accidentally insulting the choice of some readers. I should check the topics for challenges that slow fluency without necessarily building language usage.
- Finally, as a student I wanted to go back after finishing and look up some words I had "written around", and do some work on accuracy. It was pointed out by an audience member in the presentation this article is based on that a focus on language accuracy is typically to be avoided in a fluency activity. However, if I feel this way my students may feel the same, so they might appreciate some (very clearly marked as optional) followup activity recommendations on the worksheet.

Summary of Results

Each participant above produced 3-6 paired reflection-action insights for a total of 14 insights. Nearly all of the actions mentioned (12 out of 14) were possible changes to instructions or materials, with the other two being an intention to consult the literature. The most common issues mentioned were the difficulty of effectively choosing topics, the need to set clear goals, and the possible need for follow-up activities.

CONCLUSION

The aim of this project, as stated in the introduction, was to develop a process that can effectively produce ideas for future research and reflective practice. The main conclusion, based on the summary of results above, is that this goal has been successfully met. The second conclusion is that some changes to the narrative frame are necessary before it is used again, to make it more flexible in terms of collecting multiple insights in the learning stage, and improving compatibility with activities in the "I have tried this but never reflected on it deliberately" category.

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Appendix

This appendix contains the instructions given to participants as a worksheet during the initial meeting, with examples and prompts. The narrative frame used to structure the results section is given in Step 6.

Aim: Generate ideas for a reflective practice or action research cycle, by trying a language learning experience yourself. In brief:

1. List things your students do in class or for homework.
2. Pick one.
3. Plan to try it yourself.
4. Try it. Follow your own instructions, take notes on how it went.
5. Reflect. Did the experience make you want to change how you teach this activity?
6. If so, briefly share what you learned with others.
7. (separate worksheet) An optional reflective practice cycle to check any change actually works and is appropriate for students, to be discussed later.

Example outcome (Step 1-6):

- **In my class,** I ask Advanced English students to take notes on lectures in L2 (e.g. TED).
- **However, I've never done this myself. So, I decided to try it** - I went to a Spanish language session at a conference and listened to three presentations while taking notes in Spanish.
- **One thing I learned from this experience was** that at an intermediate level, even if I understand the content, note taking is hard - I can transcribe in L2, but summarising in L2 takes too much attention, and I start missing bits of the lecture.
- **As a result, I realised that in my class perhaps I** should not ask them to take notes only in English - maybe I should recommend L1 notes during lectures (except for keywords), then only later require post-lecture summaries in English.
- **However ….** <optional reflective practice cycle to check any change actually works and is appropriate for students, to be discussed later>

Step 1: Think about your teaching

List the language learning activities you ask your students to do, in and out of class.

vocab work,	*graded readers,*	*10-minute writing,*	*textbook homework,*
exam practice,	*reading logs,*	*note taking,*	*paragraph/essay writing*
presentations,	*discussions*	*debates,*	*paraphrasing*

Others: _____

Step 2: REFLECT on your own language learning experience

Think about the list above. Which have you tried yourself as a learner? Label them:

A. "I've never done this as a learner myself"
B. "I haven't done this as a learner in a long time"
C. "As a learner I do this, but differently to how I teach it"

D. "I do the same as a learner, but I haven't reflected on the experience as a teacher"

Step 3: PLAN your learning experience

- Choose something from Step 2. As far as possible, choose something:
  - DOABLE (time, level, available materials, cost, need for group)
  - USEFUL (for you as a learner)
  - SIMILAR (to your student's experience, level, etc.)
- Take notes on what you tell your students to do
  - Get a copy of your current worksheets and materials
  - Write down any verbal in-class instructions
- Maybe also:
  - If you're in a group, decide if you will choose the same or different topics
  - If you're doing something long, plan how to take notes (e.g. diary, talk-aloud)

Step 4: ACT and OBSERVE: Follow your plan as a learner and take notes

- What worked/did not work?
- What were you surprised by?
- What was more/less difficult than you thought?

Step 5: REFLECT again and take notes

- Did the learning experience make you want to change the way you TEACH?
- If so, how?

Step 6: Prepare a summary to share your results with others.

- In my class, (I ask) my students to _____ Step 1
- However, (*I've never done this myself / I haven't done this in a long time / as a learner I do this differently / I've never reflected on it deliberately*).
- So, I decided to try it - I _____ Step 2/3
- One thing I learned from this experience was that _____ Step 4
- As a result, I realised that in my class perhaps I should _____ Step 5

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Teaching Large Numbers to Japanese Learners of English

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ABSTRACT

Japanese learners of English often struggle with foreign number systems, largely due to their reliance on units of 10,000 rather than thousands. While memorising orders of magnitude can help, limited exposure to larger numbers in daily life, combined with the challenges of decoding English, can hinder comprehension in academic contexts, the news, and especially in real-time translation. To address this, I prioritise interactive methods such as George Trombley's "Zero Method," which help students convert between English and Japanese systems by 'buying' zeros. I follow this with communicative activities that provide essential practice in context. To reinforce learning, I also use creative pronunciation techniques, sometimes involving cats, to make the process both fun and memorable. Through this approach, I aim to build learners' confidence in both understanding and expressing numbers, effectively bridging the gap between English and Japanese numerical systems.

INTRODUCTION

Understanding and expressing large numbers can pose significant challenges for Japanese learners when working with English. A key reason for this is that while Japanese has a unit for one thousand, *sen* (千), it also has units of ten thousand, *man* (万). This reflects a longstanding East Asian tradition, rooted in historical accounting and administrative practices. In ancient China, large-scale administration, taxation, and military organisation often relied on groups of 10,000, and this practice was carried over into Japanese numerical systems.

As a result, learners must navigate a different set of benchmarks when using English. One strategy to compensate for this is to memorise orders of magnitude, like ten thousand, one hundred thousand and so forth, but difficulties encountered are the need to remember these different benchmarks as well as limited exposure to these larger numbers in daily life. Another challenge is the added complexity of decoding sounds when listening to statistics in lectures, news media, or real-time translation.

To support learners in overcoming these challenges, I use a range of interactive strategies. One such approach is George Trombley's (2016) "Zero Method," which encourages students to 'buy' zeros as a way of conceptualising and comparing large numbers across systems. This is followed by communicative tasks that offer contextualised, practical use of large figures. In regards to pronunciation, I use fun aids with cats to raise awareness of the use of *and* in numbers while making the material more memorable and enjoyable.

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In this article I will begin by sharing background research on the justification for teaching large numbers, along with common learning issues. This is followed by activities that address these challenges through techniques aimed at building learners' confidence and fluency in understanding and using numbers. Finally, considerations and practicalities will be discussed alongside possible adaptations to the tasks.

BACKGROUND

Why Teach Large Numbers

The ability to perceive and interpret numbers is fundamental, as Nieder (2021) demonstrates, showing that numerical systems span across species. However, for humans, the need to conceptualise and express large, exact numbers is culturally and functionally driven and shaped by societal demands. Research by Pica et al. (2004) on the Amazonian Mundurukú people illustrates that while number sense is universal, different societies develop number systems according to their specific needs, and in the Mundurukú context, counting beyond double digits is rarely required in daily life. By contrast, for English language learners and those wishing to participate in most English-speaking societies, the ability to understand and use large numbers is important for interpreting statistics in academic and professional contexts or even understanding news stories. This section explores common challenges faced by learners, particularly the demands of navigating different number systems in real time, cognitive load, limited exposure to large numbers, and phonological difficulties in decoding and production.

Different Number Systems

Japanese learners first encounter challenges when dealing with smaller numbers in English. Unlike English, Japanese, and some other East Asian languages, do not have unique words for irregular teen numbers or numbers in the tens. For example, fifteen is *juugo* (十五), 'ten-five', and twenty is *ni-juu* (二十), 'two-ten'. In fact, this consistent representation of East Asian place value has been partially linked to early mathematical advantages in children (Miura et al., 1993). However, difficulties increase even more with larger numbers, as the likelihood of encountering irregular numbers rises and because of differences in counting systems. As mentioned in the introduction, Japanese includes units of ten-thousands, *man* (万), whereas English and most other languages group numbers by thousands before move to the ten-thousands. For instance, one million (1,000,000) is expressed as, one hundred ten-thousand, *hyaku-man* (百万), which leads to an added cognitive challenge for learners who need to convert between systems.

Cognitive Load

In addition to learning a new number system, learners also face increased cognitive demands when processing numbers in a foreign language. Kulasingham et al. (2021) show that mathematical and linguistic tasks activate different regions of the brain, suggesting that stronger language skills can free up working memory. Supporting this, research on users of Arabic numerals indicates that higher linguistic competence is associated with more efficient processing of two-digit numbers (Macizo et al., 2011; Van Rinsveld et al., 2015). Moreover, the cognitive load increases further with larger, more complex numbers due to the way the

brain represents numerical magnitude. Dehaene (1997) explains that differences in small quantities (e.g., 1 or 2) are identified more readily than larger ones (e.g., 8 or 9). He also claims accurate conceptualisation declines as numbers grow, which he says is consistent with Weber's Law, relating to how it takes an increasingly larger difference to recognise a change with larger numbers.

Lack of Exposure

Another important factor to consider is that the larger the number, the less likely one is to encounter or use it. Hypothetically, when was the last time you used the number 185,635,536 (億八千五百六十三万五千五百三十六), if ever? Nation (2001), in Chapter 2, outlines several key factors in learning foreign vocabulary, including similarity to the learner's first language, frequency, usage, and utility. He is among many who argue that noticing and repeated use are essential for retention. This does not imply the impossible task of memorising all numbers; rather, teachers can support learners in leveraging systematic patterns, which I will illustrate through my activities. Such patterns are demonstrated by Dehaene (1997) who highlights that digits beginning with 1, 2, or 3 occur most frequently, with a systematic decline in usage as magnitude increases. Exceptions to this pattern include benchmark figures such as 1,000 or 1,000,000 which are more frequent due to practical relevance justifying memorisation. However, as Trombley (2016) notes in his explanation of the Zero Method, certain contexts, such as instantaneous translation, require rapid recall of less common large numbers, demanding strategies to compensate for their infrequency in everyday use.

Phonological Issues

Phonological challenges also increase difficulty, especially given the diversity of Englishes and accents worldwide. Connected speech, such as liaison, coalescence, and reduction affect the pronunciation of numbers. For instance, twenty-eight /ˈtwɛn.ti.eɪt/ may be read as /ˈtwɛnti.eɪt/ or /ˈtwɛɾi.eɪt/ with a flap /ɾ/ in some American varieties, while in my British accent it becomes /ˈtwɛni eɪt/ with the /t/ elided. The conjunction *and* further complicates matters. Not only does it add cognitive load as syllable count increases with larger numbers, but its pronunciation often changes, even in the same word. It may appear as a weak schwa /ə/ after a consonant, as /ən/ or /n/ following /d/, or almost entirely dropped when a single digit follows. From my own experience, I have observed that learners from Slavic and Japanese backgrounds, whose languages do not use *and* in number sequences, often struggle in dictation tasks involving statistics, omitting *and* and sometimes misinterpreting the following number. This highlights the importance of connected speech in numbers, and the importance in raising awareness of *and* in numbers.

ACTIVITIES

Memorisation Activities

Despite criticisms of rote memorisation in Western education systems, particularly concerns that it encourages surface rather than deep learning (Biggs, 1987), vocabulary tests and number drills remain commonplace in primary education. This continued use suggests that some degree of memorisation remains essential, such as the ability to transfer digits into

long-term memory and recall them. In contemporary pedagogy, this is often supported through visual aids, storytelling, and games. Memorisation is arguably an even more central feature of East Asian learning traditions. Xu (2022) explains that, in the Chinese context, memorisation is not equivalent to rote learning or purposeless repetition; rather, it is regarded as a prelude to deeper understanding. Similarly, Dahlin and Watkins (2000) suggest that Confucian educational values emphasise attentive effort, in which memorisation and understanding are intertwined. Taken together, these insights indicate that memorisation, when used thoughtfully, can be leveraged as a powerful educational tool.

Such memorisation techniques include semantic mapping, which has been shown to be far more effective than rote repetition alone (Badr & Abu-Ayyash, 2019). Semantic mapping involves visualisation strategies, such as linking numbers to concrete images, for example, 'one sun,' 'two shoes,' or 'three meals.' Naturally, few teachers would expect learners to reach the level of professional memorists such as Shigeyuki Ishihara, who memorised 2,400 digits by associating them with 400 distinct locations, or Rajan Mahadevan, who memorised 31,000 decimal places of pi using mnemonic techniques (Hu, Ericsson, Yang, & Lu, 2012). Nonetheless, simple approaches such as visualising a row of houses with numbered doors can make memorisation more engaging and effective. The above methods are practical tools for helping learners recall benchmark numbers, such as 1 to 100, 100, 1,000, 10,000, and the following technique, known as the *Zero Method*, is particularly helpful for memorising larger numbers.

The Zero Method

I first encountered this idea while watching a Trombley (2016) YouTube episode, which serves as a companion to his textbook *Japanese From Zero! 1* (Trombley, G., & Takenaka, Y, 2014). He shares an experience where, despite having grown up in Japan, he found himself unable to translate large numbers on the spot while giving a guided tour at an amusement park. This moment of hesitation caused him embarrassment. Determined to address this gap in his knowledge, he returned home and developed what he later called the Zero Method, a name that reflects the title of his book series. Central to this method is the concept of "buying zeros," where learners rely on knowing how many zeros correspond to each milestone value, a system visually represented in Figure 1.

Figure 1
The Zero Method Chart Visualised

1‖0	Ten (1)	Jū 十 (1)
1‖00	One Hundred (2)	Hyaku 百 (2)
1‖000	One Thousand (3)	Sen 千 (3)
1‖0000		Man 万 (4)
1‖000000	One Million (6)	
1‖00000000		Oku 億 (8)
1‖000000000	One Billion (9)	

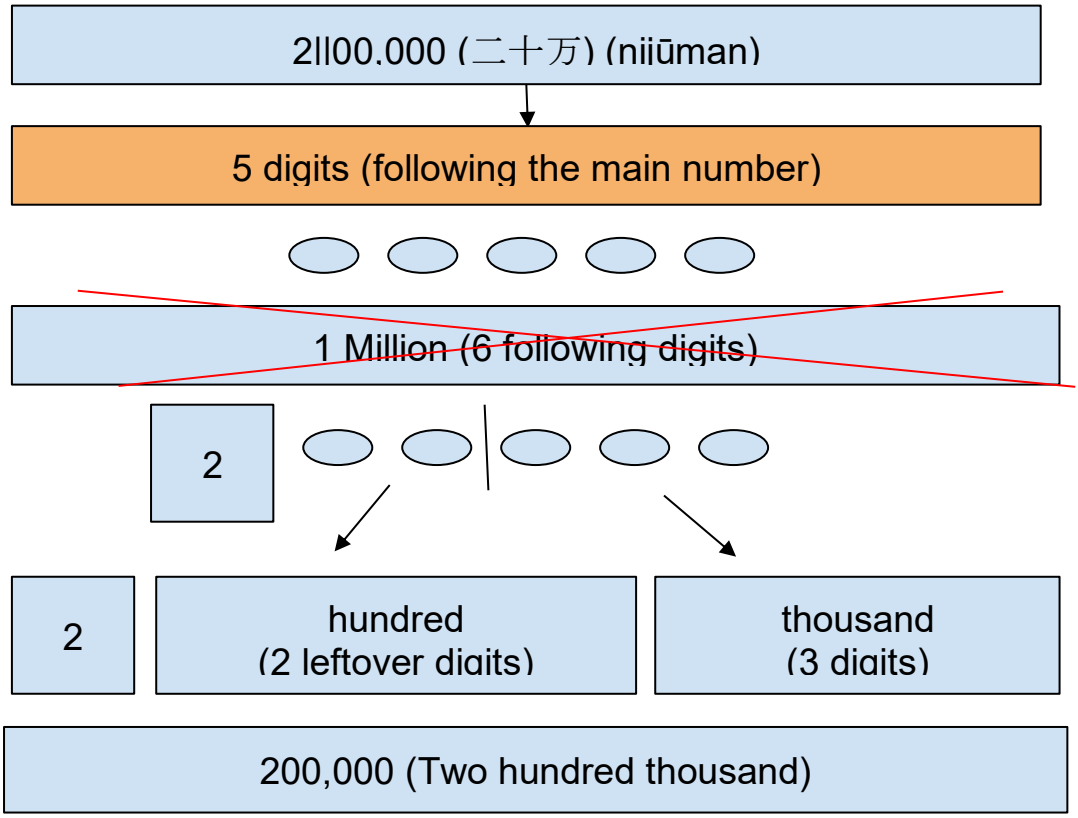
1‖000000000000	One Trillion (12)	Chō 兆 (12)

Note. The benchmark figures required to use the Trombley (2016) Zero method.

While the concept of "buying zeros" can initially confuse some, I understand why he chose this term, as larger numbers in statistics are often rounded to the nearest million, 10 million, 100 million or billion, etc. Essentially, the idea refers to counting how many zeros follow the leading digit, and using an internal visualisation technique to convert between languages as illustrated in Figure 2, a diagram I created to show how to reverse this process and convert English numbers into Japanese. In this example, the number 200,000 in Japanese, expressed as, *nijūman* (二十万), literally translates as "two ten ten-thousands." Since 200,000 contains five zeros after the leading digit, it falls short of the million English benchmark number (six zeros), meaning it cannot be "bought". However, a thousand, which is the English benchmark number below one million (three zeros) can be bought. Learners therefore "buy" the three zeros to reach the thousand level, leaving two zeros (hundreds) as a remainder. These leftover zeros are then mentally shifted to the front of the number, forming two hundred thousand.

Figure 2

The Zero Method Internal Conversion Process



Note. My own diagram displaying the internal conversion process when reversing the Trombley (2016) Zero method to convert Japanese numbers into English ones.

Mapping the process this way has personally helped me convert large numbers from Japanese to English much faster, as I have not fully memorised the benchmarks yet. I have started to use this method in my own class too with some students showing promising results. However, this method does not work for everyone including some teachers, which will be

discussed further in the considerations section. Nevertheless, the method cannot stand alone and the memorisation of large numbers must be reinforced through contextualised practice, which is the focus of the following three activities.

Activity 1: Pair Dictation

This is a straightforward activity designed for learners who have begun to feel more confident working with large numbers. While not particularly innovative, it remains useful due to its focus on specific numbers and its equal focus on both receptive and productive skills. It also offers a low-pressure, engaging context in which learners can practise at their own pace, making it especially effective for reinforcing fluency without introducing additional cognitive load. At the end of the activity, the students write down their own numbers which personalises the activity once they are feeling more confident.

1. Student A faces the PowerPoint and Student B faces away.
2. Student A reads out the number to Student B, who writes down what they hear.
3. The teacher reveals more numbers once Student B is correct.
4. The pairs switch roles and repeat the exercise.
5. Students write down their own numbers and test each other in pairs.

Figure 3
Pair Dictation

Note. AI-generated image created using OpenAI's DALL·E 3 with the prompt: "Two adult students in a classroom doing a pair dictation, one reading the number '1,356,652,623' on a whiteboard while the other writes on a notepad displaying the same number."

Activity 2: Guess the Number

This task builds on the previous one by having one student think of a large number in their head while their partner tries to guess it by asking questions. After each guess, the first student responds by indicating whether the correct number is higher or lower. The activity follows naturally from the dictation game but introduces a stronger communicative purpose

by framing it as a guessing game, adding both challenge and engagement. Unlike the dictation task, it removes the visual scaffolding of seeing the written number, encouraging students to rely solely on listening and speaking skills. As a result, the task becomes more reflective of real-life situations where learners often need to understand and use numbers without written support.

1. Student A thinks of a large, specific number (e.g., 1,243,535,356).
2. Student B tries to guess the number.
3. After each guess, Student A replies by saying whether the target number is higher or lower (using phrases like "way higher", "a little lower", etc., to give additional clues if appropriate).
4. Student B continues making guesses based on the feedback.
5. The process repeats until Student B correctly identifies the number.

Figure 4
Guess the Number Game

Note. AI-generated images created using OpenAI's DALL·E 3 with the prompt: "Two adult students learning big numbers using a higher or lower guessing game using comparatives."

Activity 3: Cat Pronunciation Activity

This task focuses on the phonological features of large numbers, particularly the pronunciation of "and" in British English. As mentioned earlier, British numbers often include *and* in both written and spoken forms, typically pronounced as /ənd/, /ən/, or even just /n/ or /ə/, depending on the number and the speaker's accent. Personally, I aim to teach different Englishes when there is a divergence, as students need to understand a range. A fun way to raise awareness of this difference is by placing a cat figure at the point where "and" would appear, as shown in Figure 5. This is because in Japanese, a cat says "nyaa" (にゃあ), which has a loose phonetic similarity to the weak forms of *and* in connected speech. Every time I have used this activity the students have loved it and they were really enthusiastic to say it out loud despite it not being natural. Of course, for anyone raising their eyebrows at this approach, it is important to clarify that once learners become comfortable with the placement, the teacher should then model and teach the natural pronunciations of *and* to prevent fossilisation of the "nyaa" placeholder.

Figure 5
Teaching Pronunciation Using Cats

Note. AI-generated cat image created using OpenAI's DALL·E 3 with the prompt: "Create a cute cat face in a similar style to the prior images" Students read one trillion, two hundred *nyaa* thirty-four million, 5 hundred *nyaa* sixty-seven thousand, eight hundred *n*ny*aa*nety.

CONSIDERATIONS

Which Tasks and When

With the exception of the final task, which could be introduced at any stage, the sequence of processes and activities was designed to follow a specific order to reflect increasing cognitive complexity and communicative relevance. As discussed, memorisation through a range of methods is essential if learners are to manipulate large numbers effectively. Once this foundation is established, the subsequent activities are designed with a clear communicative purpose, giving them practical relevance and helping to motivate learners to actively use numbers in meaningful contexts. The first activity is still scaffolded, providing structured support to build learner confidence, while the second activity is freer and more open-ended, integrating multiple language skills in a way that more closely reflects real-life communication. The final task serves to remind learners of key phonological features with its primary value lying in developing decoding and receptive listening skills.

PRACTICALITIES

Criticisms of the Zero Method

Although I have had success using the Zero Method with learners, I have found it more challenging to explain, particularly when presenting it to other teachers. This is partly because it is the kind of technique that is better understood through practice rather than explanation, although Trombley's (2016) YouTube demonstration is notably effective. One reason some teachers have struggled to grasp the concept may be that they already have a strong mastery of both number systems, making the method, designed as a gateway to long-term memorisation, feel like a step backwards for them. Additionally, individual learning preferences play a significant role; as with any method, this approach may not suit everyone.

A Never Ending Guessing Game

If not well facilitated, the guessing game activity can become overly long and drift off-topic. To prevent this, it is crucial for the teacher to pre-teach and drill necessary language, bearing in mind that language and mathematical processing activate different areas of the brain. For example, if one student thinks of 1,362,364,263 and the other guesses 50,636, simply saying "higher" or "lower" gives little indication of how far off they are which can make the process inefficient and frustrating. Therefore, it is important to teach a range of comparative and quantifying language such as 'No, it's way higher', or 'You're

close but it's a bit lower' to help manage the pace of the game. This ensures the activity is engaging and purposeful, while still allowing enough time for repetition and automatisation.

CONCLUSION

Teaching large numbers goes beyond memorisation and recall as it requires learners to understand them in context and use them effectively, often in mathematical situations or when explaining statistics. However, larger numbers pose challenges for all learners due to greater cognitive load, limited exposure, and phonological complications with Japanese learners of English facing the additional hurdle of a different number system. To address this, a focus on innovative memorisation strategies followed by motivating, communicative tasks is essential, ideally progressing from structured, scaffolded activities to more open-ended practice. Flexibility remains key, as learners respond differently to each approach. As discussed, the Zero Method can be hit or miss, and teachers must judge its suitability for their students. The dictation and guessing games shared here are simply my own adaptations of already widely used classroom techniques and many other activities exist. It is also important to remember that phonology plays a vital role in decoding, and if this article offers anything original, it may be the 'cat pronunciation' activity which is something likely unique to Japan, and perhaps even to my own teaching imagination.

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