USING SHUWA (JAPANESE SIGN LANGUAGE) GESTURES IN THE JAPANESE CLASSROOM

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ABSTRACT

This paper outlines a new initiative where gestures based on *shuwa* (Japanese sign language; hereafter referred to as 'shuwa') were introduced as a support for language learning in a primary classroom. An original text that aligned with the Australian Curriculum was created to work with the shuwa, which became a platform for language learning. The trial surpassed expectations, with students engaged and successful in the learning intentions.

INTRODUCTION

'I hear and I forget, I see and I remember, I do and I understand.' (Confucius)

There has been a variety of research in the use of gestures to support second language learning. Some studies have focused on the influence of gestures toward auditory learning (Hirata and Kelly 2010), while others have focused on the role of co-speech – gestures that naturally accompany speech. A plethora of research addresses the positive benefits of the use of gestures in language learning, particularly in relation to supporting comprehension and recall of newly acquired language.¹ Rosborough (2004) focuses on "whole body sense making" (227), where the gesture supports comprehension. McCafferty (2002) views the use of gesture as supporting interaction between participants in a social environment. Porter (2016) explores the use of gestures to support second language learning where language classes occurred once a week, and in particular compared the use of visuals on their own to using visuals with gestures. Findings showed that visuals with gestures led to more effective retrieval cues and richer memory traces. Gullberg (2010) suggests gestures used in second language acquisition are interconnected with oral communication, and refers to them as not simply gestures but as a system. This more substantial view of the use of gestures has also been supported by Mathison (2017), who suggests that the use of gestures "enhances mental representations" (289). This would perhaps be a sound argument for the use of shuwa (手話; Japanese sign language), which is not only culturally significant in teaching Japanese but also brings a wonderful shared-experience and story-telling element to language learning. I think we would all agree that students learn more from experiences than from vocabulary lessons.

BACKGROUND

RATIONALE

The decision to use shuwa to support Japanese language learning was the result of a small group of teachers who met to explore the benefits and pitfalls of using gestures to support language learning. The first challenge faced was that none of the teachers were trained in Japanese sign language. This group met on numerous occasions which led to the JLTAV Shuwa Project, a project coordinated by the Japanese Language Teachers Association of Victoria (JLTAV) and comprising teachers from both primary and secondary member schools. The goal of the JLTAV Shuwa Project is to develop a database of consistent and culturally-authentic signs that can be used by teachers to support Japanese language learning. These signs were all taken from Japanese sign language databases or online sources and were kept authentic except where culturally incompatible (e.g., where signs have a negative meaning in the Australian culture), in which case modifications were made.

In spite of a lack of training in Japanese sign language, this group sourced shuwa dictionaries and educational texts, online resources including comprehensive search engines for shuwa and video resources, and developed a goal and a timeline. In the three years since this rather small and humble beginning, the goals have grown and the JLTAV Shuwa Project has expanded to include the development of original texts, supporting videos (uploaded to the JLTAV Youtube Channel) and resources.

While the JLTAV Shuwa Project has indeed grown into a significant initiative of the JLTAV, it is in the language classroom where shuwa is delivering real benefit. Not only has this trial increased motivation among the students, it has also led to significant improvement in the oral and reading skills of the students.

This argument is highly supported by a number of scholars including McCafferty (2002), Tellier (2008), Gullberg (2006 and 2008) Hirata and Kelly (2010), Churchill et al. (2010), Casey et al. (2011), Rosborough (2014), Hirata et al. (2014), Morett (2014), Wakefield and James (2015), Porter (2016) and Mathison (2017).

PRIMARY SCHOOL: SHUWA TRIAL

Year 4 students were the first to engage in using shuwa as co-language in a trial of the unit, *Nekochan to Sakanasan* ("The Cat and the Fish"). This unit was based on an original text created for the Shuwa Project and included not only Japanese sign language for all of the language within the story, but a significant linguistic component including a focus on the use of *furigana* (phonetic guide) with *kanji* (Chinese characters), the introduction of a variety of adjective types, and use of a number of grammatical particles and sentence structures. With each new page of the story, a new linguistic focus was introduced which built upon the previous one. By the end of the unit of work, the Year 4 students were able to read the full text (17 PowerPoint slides in hiragana), read a number of high-frequency kanji, and demonstrate their comprehension through the use of shuwa.

This trial was successful on a number of fronts. The students thoroughly enjoyed the story and the activities that accompanied the story, and commented on the use of shuwa in a positive way, stating that when they didn't use shuwa it was much more difficult to understand the meaning of the text. It is worth noting that as they progressed, some of the signing dropped off a little as students became more confident in their knowledge, while other students used the signs almost subconsciously. The co-learning of shuwa by the students with the teacher contributed to a deeper and more authentic relationship within the classroom which positively influenced classroom behaviour and the overall atmosphere in the learning environment.

The linguistic progress made by the students far surpassed expectations. The student recall of vocabulary and comprehension of the content was quick and thorough, and due to this, learning to read the text in hiragana became almost autonomous.

BENEFITS OF USING SHUWA

Using shuwa provided visual support for comprehension, so when students appeared to struggle with understanding, the teacher was able to sign using shuwa and this triggered the students' memory. The visual connection between the sign, and the lexical item (and at times also the kanji character) allowed the students to visualise the word in the second language and use that to recall the word (Porter 2016). The kinaesthetic aspect of using sign meant that the signs became muscle memory and students were able to use the shuwa to trigger this memory both orally and kinaesthetically. The sign and oral language became a single unit in the students' memory (Tellier 2009). The student use of shuwa became active language learning incorporating multimodal aspects (Tellier 2009) and as a result students were holistically focused on the language. This meant that the students were thoroughly engaged throughout the course of this unit of study which benefited behaviour management.

The origin of each of the signs used was discussed when it was introduced. The origins of some of the signs are culturally rich and through the sharing of the story, the language became a shared experience and memory, not just a lexical item.

PROGRAM

The story of "The Cat and the Fish" was designed to address the achievement standards in the Australian Curriculum in the Year 3-4 Band, while engaging students and providing a launching pad for using shuwa to support language learning. Each instalment of the story addressed a new linguistic focus that built upon the previous learning. While the overarching goal was to read a text in hiragana and kanji with the support of shuwa, this unit also met a number of additional Achievement Standards, as outlined below.

INSTALMENT 1

The first three pages introduced the students to the main characters, Nekochan and Sakanasan (Figure 1).



Figure 1: First three pages of the story Nekochan to Sakanasan

The language accompanying this instalment included the use of furigana to support kanji reading, adjective/noun order in sentences, grammatical subject and object particles, and two sentence patterns and the use of both positive and negative verb endings. Students also looked at punctuation, comparing Japanese to English.

In using shuwa, the students were able to recall the vocabulary very quickly, with related shuwa providing clear comprehension clues and shuwa origin stories creating a shared experience in the telling of the tale. For example, the shuwa for 'bear' (〈ま; kuma) is drawing a 'moon' shape from one shoulder to the other, which prompted a discussion about what are often referred to as 'moon bears' (Figure 2).

The shuwa for 'cat' (ねこ; neko) is moving one hand up and down like a Japanese 'lucky cat', which again provided an opportunity for a conversation about culture and the origin of the lucky cat. Signs for 'mountain' and 'fish' are also visually similar to the actual object, providing instant comprehension clues for students. Throughout this unit, students were often able to recall the word in response to the sign from the teacher.



Figure 2: Shuwa for 'bear', 'cat', 'mountain' and 'fish' (all shuwa images sourced from http://hs84.blog.jp/)

INSTALMENT 2

Repetition of the sentence pattern provided reinforcement for the sentence patterns learned. New kanji were introduced with discussion focusing on how kanji is built in parts. This instalment of the story included the use of counters (which students learned in their previous year of study using the counter for small animals). Students were challenged to count the monkeys in kanji (Figure 3).



Figure 3: Instalment 2 of Nekochan to Sakanasan

The shuwa introduced in this part of the story related to 'tree' $(\pi; ki)$ and 'forest' $(\pi; mori)$, and after a discussion about the shuwa (Figure 4), students felt that these signs closely related to the actual kanji. This opportunity to discuss the possible origin of the sign language led to a deeper understanding of not only the vocabulary items, but also of the kanji and the culture of Japan.

Students were invited to imagine what the shuwa for 'monkey' might be, with some very interesting results, but again resulting in sound comprehension of both vocabulary and shuwa.



Figure 4: Shuwa for 'tree', 'forest' and 'monkey'

INSTALMENT 3

The kanji focus in Instalment 3 built on the previous one, where 'tree' (木; ki) and 'forest' (森; mori) were introduced, and students were challenged to try to work out the meaning of this kanji using their understanding of how kanji is read and the context in the images (Figure 5). An additional focus in this part of the story was on the double vowel used in the word for 'wolf', i.e., ookami (おおかみ), which is an important pronunciation feature in Japanese language, and students discussed other Japanese words that might use similar patterns, coming up with the word for 'big' (おおきい; ookii) and the name of the city 'Osaka' (おおさか; Oosaka).



Figure 5: Instalment 3 of Nekochan to Sakanasan

Again, students were challenged to anticipate what this shuwa might be and students really focused on the shape and composition of the kanji in this endeavour. When they were finally introduced to the shuwa, they felt it was consistent with other kanji relating to trees (Figure 6).



Figure 6: Shuwa for 'woods'

INSTALMENT 4

In this part of the story students explored the concept of compound kanji with the use of 'bamboo forest' (竹林; takebayashi) and again provided examples of other kanji in compound words (i.e., two kanji used to write a single word), coming up with 'volcano' (火山; kazan), 'one small animal' (一匹; ippiki) and 'Japan' (日本; Nihon), to name a few. The shuwa which reflects both the object (i.e., bamboo) and the shape of the kanji brought forward much discussion about the origins of language, both sign and oral (Figure 7).



Figure 7: Shuwa for 'bamboo'

An additional focus was on pronunciation of both 'scary' (ZDU'; kowai) and 'cute' (DDUU'; kawaii), where the initial vowel sounds 'o' and 'a' after the initial consonant 'k' can easily be mispronounced, and the final extended 'ii' is also essential in the pronunciation to differentiate the meaning. These are common issues in pronunciation that students often struggle with. Using the sign language with these adjectives seemed to enable students to be more aware of these pronunciation issues and in this part of the story; using the shuwa not only supported comprehension but also improved pronunciation of the adjectives.

Furthermore, through this discussion students began to take notice of the hiragana representation of long vowel sounds not only in the adjective for 'cute' (かわいい; kawaii), but also in the words 'yellow' (きいいろ; kiiro) and 'big' (おおきい; ookii) (Figure 8), which contain a similar long vowel.

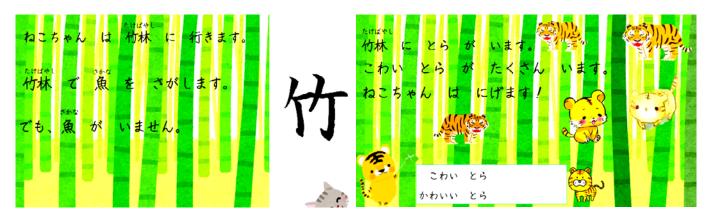


Figure 8: Instalment 4 of Nekochan to Sakanasan

INSTALMENT 5

The kanji focus in this instalment was on identifying different parts of kanji (called radicals) which often carry meaning that contributes to the overall meaning of the character. In this instalment, the focus was specifically on the so-called 'splash' radical (representing the element 'water', occurring on the left side of the character) in the kanji for 'sea' (海; umi).

In addition, the students were asked to read more complex sentences using colour adjectives and sentences containing words connected with the particle for 'and' (¿; to) (Figure 9).



Figure 9: Instalment 5 of Nekochan to Sakanasan

The shuwa for 'sea' (海; *umi*) instigated a lot of discussion, particularly relating to the 'splash' radical and whether this kind of compound was also represented in the shuwa sign (Figure 10).

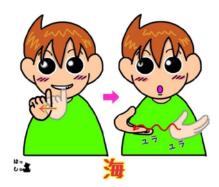


Figure 10: Shuwa for 'sea'

INSTALMENT 6

In this final instalment, the use of the 'splash' radical was further explored with the kanji for pond (池; *ike*) that also included this water element, and students read more complex sentences comprising adjectives and nouns learned throughout the story. At this point, the students were able to read with very little support, although they still used the shuwa to convey the meaning (Figure 11).



Figure 11: Final instalment of Nekochan to Sakanasan

Introducing the shuwa for 'pond' led to a discussion around similarities in the shuwa for 'tree' (木; ki), 'woods' (林; hayashi) and 'forest' (森; mori), and whether this was consistent in other related vocabulary items, for example, bodies of water (Figure 12). Through these in-depth discussions around the structure of languages, the students not only developed their understanding of Japanese language, but also expanded their cultural understandings of both Japanese oral and sign language.



Figure 12: Shuwa for 'pond'

The creation of an original text as a foundation for the introduction of shuwa was successful, and creating this text purposefully allowed us to align with the Australian Curriculum standards and incorporate the additional linguistic focal points effectively, while maximising the support that shuwa provided. Certainly, it is worth the effort of creating a text to suit student linguistic and developmental level and learning intentions.

BENEFITS AND PITFALLS

BENEFITS

At the end of this trial in Year 4, the students were able to read the full text with comprehension and did so with confidence. They felt successful and this motivated them to want to learn even more. The inclusion of shuwa changed the atmosphere of the classroom to one where reading was not a passive activity, but rather a fun and high-energy kinaesthetic one. Shuwa provided not only comprehension clues for students throughout the reading of the text, but turned the learning process into a more active one, where students were involved both mentally and physically. Additionally, using shuwa provided additional visual clues for learners who required additional support in their language learning.

The amount of cultural context underlying the shuwa also added a depth to the language learning that turned simple vocabulary lessons into learning experiences. Students' interest in similarities and differences between Japan and Australia was piqued, particularly in relation to native animals (while learning the vocabulary for 'bear') and in the difference between 'woods' (林; hayashi) and 'forest' (森; mori). By shifting the learning from incidental vocabulary to a shared learning experience, the students' learning was deeper and more comprehensive.

One of the most positive outcomes of using shuwa in conjunction with the teaching of this unit was the commitment of the students. Where traditional reading activities can lead to passivity and opportunities for students to disengage, using shuwa meant that all students were participating in the moment and any disengagement was immediately apparent. This allowed for maximum participation within the classroom and positively benefited the behaviour management of the classroom.

PITFALLS

The major stumbling block in delving into the use of shuwa was in obtaining resources to learn the sign language, and in navigating the various 'dialects' and making decisions about which signs to use. NHK's online shuwa dictionary² was a valuable resource, as was the website *Shuwa Shuwa shushushu*³, particularly due to its search function. In addition, a number of texts were obtained from Japan, which provided further resources. There is still some concern, however, that the shuwa language is being respected and taught effectively given that the teachers using it are all self-taught. This became particularly problematic in relation to particles and other grammatical items that did not have easily accessible resources; in fact, in some cases it was necessary to view lengthy shuwa videos to identify signs that were being used for particles.

In addition, there are some signs that, while a standard part of shuwa, are not appropriate for use in Australian schools. These had to be modified (e.g., 'brother', which involves raising the middle finger of the hand, and 'siblings' which requires the middle finger of both hands being raised multiple times). These modifications were made after discussion with colleagues and based on similar but less offensive gestures (e.g., using the thumb, rather than the middle finger, as the thumb was used for 'father' and 'grandfather' and therefore reflected the male line of the family).

The final pitfall has both negative and positive aspects. The learning achieved by the students over the course of this trial meant that the future curriculum will need to be rewritten, as the students far surpassed expectations and accomplished nearly all the set work. Certainly, shuwa will continue to feature in these students' learning as they are now quite competent signers (to the extent of this text) and are keen to expand their physical vocabulary. One possible concern is that the students will become so dependent on the co-language of oral and sign that their oral language skills will deteriorate without the physical support of shuwa. This is yet to be seen, but potentially a concern in the future.

CONCLUSION

Throughout this trial period, while shuwa was a focal point of the language learning, students were able to improve their oral and reading skills as well, and the shuwa became a co-language that both supported comprehension and improved communication. Student use of shuwa became almost automatic, but the most exciting result was the confidence with which they used oral language. The explicit instruction on the grammar in the teaching of this text led to an additional benefit. The students became more comfortable in the use of grammatical particles, word order and sentence structure and this carried on in subsequent teaching units. Whether this acquisition was a rote-learning process resulting from explicit instruction or involved acquisition at a deeper level is as yet unknown (Ellis 2002), and perhaps would justify future work in this area with grammatical acquisition as an additional focal point.

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