Evaluating Multi-Skill Vocabulary Activities Using the Technique Feature Analysis (TFA) Framework

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Introduction

One problem plaguing EFL learners in Japan is the limited exposure to the target language outside the language classroom. Most learners only have an opportunity to learn during the two or three hours a week of English language lessons. This creates the need to maximize the limited classroom contact time. One way in which this maximization can be achieved is through the deliberate teaching of vocabulary in the classroom. Deliberate teaching and learning of vocabulary in the second language classroom is an effective way of improving learners’ vocabulary knowledge (Laufer & Shmueli, 1997; Min, 2008; Zimmerman, 1997). This is because activities that involve deliberate learning of vocabulary facilitate “elaborate processing,” the deep analysis of learned target words that determines their retention and subsequent recall in the long-term memory of learners (Craig & Tulving, 1975). However, achieving the above depends on the vocabulary activity employed. While there are many activities that L2 teachers can use in the Japanese EFL classroom, a deliberate vocabulary learning activity is only effective to the extent that it contains design features such as learning goals, target words, tasks and psychological conditions that facilitate learning. The ability to look for these important features in activities, will better equip L2 teachers, particularly in Japan, and Asia in general, to evaluate their own vocabulary activities in the classroom and to improve them.

This report is an assessment of a multi-skill vocabulary activity that the writer employs in his English language classroom at a Japanese university, using the TFA scoring framework.

The Technique Feature Analysis Framework

Nation and Webb’s (2011) TFA is simply a method of evaluating a vocabulary activity to determine features in it that are conducive for effective vocabulary learning. These features include the goals of the activity, the learning conditions it enables, the signs that learning is occurring, and the design features of the activity itself. The TFA as a theoretical framework outlines five main components that a vocabulary activity must incorporate in order to be effective for vocabulary learning. The framework simplifies the evaluation process by supplying a set of criteria in the form of questions under each component to assess their presence in an activity. Scores of the questions are measured in a binary form; one for a ‘yes’, and
The five components are motivation, noticing, retrieval, generation or creative use, and retention. Motivation is linked to interest, which in turn can be linked to goals. When an activity has a clear goal, learners are motivated, they get involved in the activity, and this sets the foundation for other conditions that enable learning to take place. Noticing enables learners to focus on a word outside of the context in which it is being used in the text, and rather as a language item. When learners negotiate the meaning of words, or words are briefly defined during an activity, noticing occurs (Ellis, Tanaka, & Yamazaki, 1994). Retrieval is the subsequent meeting of a previously noticed word within the same activity as long as the word and its meaning are not presented simultaneously in the subsequent meetings. There also needs to be a reasonable time lapse between these meetings. When a learner learns the meaning of a word he meets the first time in an activity either through negotiation or definition, and later on in the same activity meets the same word, he is forced to link the form with the previously learnt meaning. This strengthens his memory of the word. If the word is given and the meaning is retrieved in a listening or reading activity, it is receptive retrieval, and if the word itself is retrieved to convey meaning in a speaking or writing activity, it is productive retrieval. Retrieval could also be either recognition or recall. In recognition, learners choose the meaning of the target word from a list of options. The harder but more effective form of retrieval is recall because learners make an effort to recall the meaning of the word without any list of options. Generation or creative use is also called varied retrieval. It refers to the subsequent meeting or use of a previously noticed word but in a different context. The new context, according to Nation (2005), forces the learner to reconceptualize the meaning and uses of the word and thus, strengthen his memory of it. Generative use can also be receptive or productive. It is receptive if the context is a reading or listening activity, and productive in a speaking or writing context. Although Nation (2005) grades generation into degrees (from low to high), what is not clear is if the use of other word family members of the word or mere inflection of it constitutes generative use. Retention is the ability by learners to internalize new vocabulary items they meet in an activity so that they can readily recall the words after some time. The way in which a vocabulary activity is designed can either hinder or facilitate retention. These five components may be mere mental constructs rather than physically observable phenomena, nevertheless, they enable the evaluation of any activity by the basic mental processes that underlie vocabulary learning. Webb (2013) refers to them as necessary psychological conditions that contribute to vocabulary learning.

The problem with the TFA framework is the difficulty of determining how much importance to attach to the components or the 18 criteria. For instance, are there any criteria that should be considered more important than the others? Furthermore, if the categories are broken down individually, it seems that motivation would tie for the lowest scores whereas motivation is supposed to set the foundation for the other conditions to take place. Nevertheless, a number of studies have examined the reliability of the framework in predicting the effectiveness of vocabulary activities (Hu & Nassaji, 2016; Zou & Xie, 2018) and found it reliable.

The Multi-skill Vocabulary Activity

The activity involves reading, writing, and speaking tasks. Since reading a text is involved, the text selected is a short story, “The Lady or the Tiger” by Stockton, F (The story can be found at https://1drv.ms/w/s!Aq1RhYqpKEW1g6UUGU6HoHptmoa67Q). First, students read the text with the target vocabulary highlighted within the text and their meanings provided at the end of the passage. Next, the students create a visual representation of the information in the text by making a free-form outline using the highlighted words. A free form outline could be any form of post-reading illustration such as maps, web, story board or radial outlines that is used to give a summary of the contents of a reading
passage. A sample outline is included in this paper (see Figure 1). Finally, students work in pairs and take turns narrating the story to their partners using the free form outline.

TABLE 1
Checklist for the Technique Feature Analysis

| Component | Criteria | Scores |
|-----------|----------|--------|
| Motivation | Is there a clear vocabulary learning goal? | 0 |
| | Does the activity motivate learning? | 0 |
| | Do the learners select the words? | 0 |
| Noticing | Does the activity focus attention on the target words? | 0 |
| | Does the activity raise awareness of new vocabulary learning? | 0 |
| | Does the activity involve negotiation? | 0 |
| Retrieval | Does the activity involve retrieval of the word? | 0 |
| | Is it productive retrieval? | 0 |
| | Is it recall? | 0 |
| | Are there multiple retrievals of each word? | 0 |
| | Is there spacing between retrievals? | 0 |
| Generation | Does the activity involve generative use? | 0 |
| | Is it productive? | 0 |
| | Is there a marked change that involves the use of other words? | 0 |
| Retention | Does the activity ensure successful linking of form and meaning? | 0 |
| | Does the activity involve instantiation? | 0 |
| | Does the activity involve imaging? | 0 |
| | Does the activity avoid interference? | 0 |

Maximum score 18

(Nation & Webb, 2011, p. 7)

*Figure 1.* A free form outline of the story, “The Lady or the Tiger.”
Evaluating the Activity

TABLE 2
The Technique Feature Analysis Scores of the Activity

| Component | Criteria                                       | Scores |
|-----------|-----------------------------------------------|--------|
| Motivation| Is there a clear vocabulary learning goal?    | 1      |
|           | Does the activity motivate learning?          | 1      |
|           | Do the learners select the words?             | 0      |
| Noticing  | Does the activity focus attention on the target words? | 1      |
|           | Does the activity raise awareness of new vocabulary learning? | 1      |
|           | Does the activity involve negotiation?        | 0      |
| Retrieval | Does the activity involve retrieval of the word? | 1      |
|           | Is it productive retrieval?                   | 0      |
|           | Is it recall?                                 | 0      |
|           | Are there multiple retrievals of each word?   | 1      |
|           | Is there spacing between retrievals?          | 0      |
| Generation| Does the activity involve generative use?     | 1      |
|           | Is it productive?                             | 1      |
|           | Is there a marked change that involves the use of other words? | 0      |
| Retention | Does the activity ensure successful linking of form and meaning? | 1      |
|           | Does the activity involve instantiation?      | 1      |
|           | Does the activity involve imaging?            | 1      |
|           | Does the activity avoid interference?         | 1      |
| Total score|                                              | 12     |

Discussion

Motivation

Is there a clear vocabulary learning goal?

Yes. The tasks of creating a visual representation of the story and using it to retell the story constitutes a learning objective and can engender bigger learning goals. Baddeley (1990) and Joe (1995) both acknowledge the contribution of visual representation of words and story retelling tasks respectively on enhancing learners’ level of word processing.

Does the activity motivate learning?

Yes. The hands-on or experiential nature of the activity has the potential to motivate learning. Lee (1997) found a strong link between learners’ positive motivation towards learning and their perceived enjoyment and usefulness of the learning activity. Both adult and young learners enjoy some form of drawing, more so, when it is useful to complete another task (in this case the retelling task). In order to complete the visual representation tasks, learners are forced to learn the target vocabulary.

Do the learners select the words?

No. This is because the target words are already highlighted in the provided text. Webb (2013) suggests that when students choose the words themselves, it may have a positive influence on their learning
because the students have indicated that these words are important to them. One way to improve this activity then will be to remove the highlights on the words in the passage and let the students choose which words they consider important to them. This, however, might be difficult for lower level learners.

**Noticing**

**Does the activity focus attention on the target words?**

Yes. For learning to occur, learners need to notice the vocabulary item, and be aware of it as a useful language item (Ellis, 1990). The use of bold fonts to mark out the target words in the selected reading in the activity draws the learners’ attention to these words. The learners then make use of the target words to create the free form outline, and again in retelling the story.

**Does the activity raise awareness of new vocabulary learning?**

Yes. Webb (2013) notes that when students see or use words in original sentences, or sense an improvement in performance, awareness of new learning is created. By retelling the story over and over to different partners, students will notice an improvement in their ability to use the target words.

**Does the activity involve negotiation?**

No. This is because students do not have to search for the meaning of the words since they are already provided in the text. Removing the meaning from the text and asking students to find them using dictionaries or asking friends might be a way to improve the activity.

**Retrieval**

**Does the activity involve retrieval of the word?**

Yes. The target words and their meanings are given together in the text, however, since some of the words occur more than once in the passage, retrieval could take place in the subsequent meetings. Also, retrieval could occur at the free form outlining task or during the retelling of the story. Moreover, in the story retelling task, the learner might be asked for the meaning of any of the target vocabulary items by his peer.

**Is it productive retrieval?**

No. There is no meaning to form retrieval. However, the retrieval would be productive if learners are asked to retell the story from memory.

**Is it recall?**

No. Recall involves retrieving the words and meanings from memory, while recognition involves choosing from a list of options. The type of retrieval particularly in the subsequent tasks (outlining and story retelling) can be recall if the students complete the tasks from memory. Referring to the results of studies, Nation (2005) concludes that it is best for learners to meet the target word and its meaning simultaneously at the first meeting, and to meet only the word in subsequent meetings because it creates the opportunity for effort leading to successful recall.
Are there multiple retrievals of each word?

Yes. Students access the words in the free form outline creation task and again in retelling the story. The latter task could involve retelling the same story over and over as they switch from one partner to another. Each instance of retelling the story constitutes a successful retrieval of the target words, and as Webb (2013) observes, enables learners to form a stronger link between L2 form and L1 meaning, thus making it easier to retrieve the word from memory.

Is there spacing of retrievals?

If the activity is completed within a lesson period, then there is no spacing between each retrieval. However, the activity can involve spacing if there is enough time lapse between the first task and the subsequent tasks. For instance, the reading could be done in class and the creating of a free-form outline assigned as homework, while the story retelling using the created free-form outline is done again in class the next day.

Generation

Does the activity involve generative use?

Yes. The target words are used both in creating the free-form outline and in retelling the story. These could constitute different use contexts. The creation of a visual representation of a word could be an example of instantiation as we shall discuss later, and according to Baddeley (1990), can result in some form of mental elaboration that enhances learning. Elley (1989) also sees a positive effect of visual representation of the target words in a story on vocabulary learning.

Is it productive?

Yes. This is because the words are used in new ways and students are challenged to use the words to accomplish the task of retelling the story. As a way of encouraging productive generative use, Nation (2005) suggests asking learners to retell the story from a different focus by requiring that they reconstruct what was in the text rather than repeat it.

Is there a marked change in the context that involves the use of other words?

No. There is not enough room for the learners to use the words in ways that differ from how they are used in the story, at least in principle. However, in retelling the story, students might at least be forced to use the target words in slightly different ways. In a study on vocabulary learning in vocabulary-based tasks, Joe (1995) found a close relation between the degree of generation and the amount of learning in story retelling tasks.

Retention

Does the activity ensure successful linking of form and meaning?

Yes. The reading text provides a list of the target words and their meaning. This according to Webb “ensures a very high degree of success if learners do try to retrieve the words during the later stages of the activity” (2013, p. 129). However, the provision of a list of the words and their meanings may inhibit successful retrieval because of the tendency for learners to rely on the provided meaning in the passage. It
might be better therefore, not to provide this list, but to have learners use dictionaries or discussions to find the meanings and familiarize themselves with them. By doing this, learners can avoid the urge to always go back to check them.

**Does the activity involve instantiation?**

Yes. Instantiation occurs when the context in which a word is met aids in the subsequent retrieval of the word. It is the process of associating a word with a context. Dramatic contexts are always hard to forget. For instance, a person who is alerted to danger with the word “watch out,” automatically links the word to that instance, and the memory of that situation aids in recalling the word. Instantiation works not only in dramatic situations, but also in other situations when a word is interacted with, such as writing and visual representation. It is the idea behind such learning techniques as word cards and Total Physical Response (TPR). As noted earlier, the illustration of the story can serve as a visual representation of the target words and create a context that will help in recalling the words.

**Does the activity involve imaging?**

Yes. Imaging is the linking of an image form to the word form in a way that will aid remembering of the word. Mindmapping constitutes imaging since it is used to visualize target words in a text. The mapping task in the activity provides a good opportunity for imaging.

**Does the activity avoid interference?**

Yes. Most of the words in the list are less likely to be confused with each other. Interference occurs when learners cross-associate the meaning of one word with another as a result of their close meaning. A good example is the learning of all the parts of the body at one time.

**Conclusion**

This report evaluated a multi-skill vocabulary activity using the TFA framework and assigned it a score of 12. This means that the activity can be effective for vocabulary learning in an L2 classroom. While some of the criteria of the TFA might be legitimately called to question, ultimately, its goal is that L2 teachers can be aware of what matters when we learn vocabulary and how we can change things to improve the learning.

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