Chapter 49
Vocabulary Learning Through Picture–Viewing and Picture–Drawing on Tablets

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ABSTRACT

Beginning learners of English frequently use flashcards as a tool for learning vocabulary. However, because of the consciousness difference between the picture-readers and picture-drawers on vocabularies, errors may be involved in the learners' comprehension of the vocabulary terms on the flashcards. This article develops and evaluates an English vocabulary learning strategy for tablet devices on which learners' viewing and drawing corresponding to vocabularies on the mobile devices. Fifty-two elementary school students were recruited and divided into two groups: The first group read the printed flashcards from electronic files, the second group read the flashcards drawn by students themselves. The results indicated that the drawing learning strategy was beneficial for increasing both their learning motivation and memory retention. The learners could create their own learning content by drawing pictures in such a manner that the pictures were highly relevant to the meaning of the target word, thus transforming their learning pattern from passive to active.

INTRODUCTION

For beginners of English as a foreign language (EFL), memorizing new vocabularies frequently requires considerable effort, but forgetting what is learned is relatively easy. Therefore, studies have developed a picture-based teaching approach that involves using flashcards for assisting English beginners to learn unknown words. For example, Schmitt (2000, 2010) employs comprehensible pictures to help learners memorize vocabularies. Nation and Yamamoto (2012) applied cards with pictures in students' autonomous learning activities (Nation, 2007).

Although teaching vocabulary by using flashcards is an unfashionable technique, research has shown it to be highly effective in deliberate language learning (Nation, 2003). Relevant studies have verified that appropriate flashcard use can help students learn new vocabularies quickly (Elgort, 2011; Wright, 1989). In addition, the effects of using digital flashcards have been discussed in recent research (Komachali & Khodareza, 2012; Hung, 2015) and have supported teachers teaching vocabulary in the classroom.

The value of flashcards is limited by decontextualing content (Oxford & Crookall, 1990); moreover, teachers often consider learning words on flashcards to be inappropriate for various reasons (Nation & Yamamoto, 2012; Nicholson, 1998). First, students' passive learning motivation could easily compromise their concentration and interest in learning, particularly when learners receive information repeatedly and passively without peer interaction in deliberate language learning (Petersen, Divitini, & Chabert, 2008). Another problem involves learners having different backgrounds; hence, they may interpret the object or image shown on flashcards differently according to their personal experience and comprehension. Moreover, the picture and text binding mechanism is age dependent (Willows, 1978). The discrepancy between the content of a picture and the cognition of a learner, as well as any incoherence between the picture and the meaning of the vocabulary, may result in cognitive conflict.

This study provided English learners with a digital flashcard system in which pictures could be drawn individually on a mobile device according to their own understanding of the meanings of vocabularies. During the picture-drawing process, the learning method transformed from passive to active learning, thus increasing the learning motivation of the learners. Functions for instantly sharing the flashcards, ranking them, and viewing those drawn by others were installed to increase peer interaction. Viewing peers' shared pictures aids students in drawing meaning-focused pictures corresponding to unknown vocabularies. This study explored the effects of a picture-based learning strategy among viewing, drawing, and sharing on vocabulary memory retention and learning motivation on tablet for assisting students in learning English vocabulary.

LITERATURE REVIEW

Flashcards are frequently used by teachers for applying memory strategies; specifically, recurring pictures can stimulate learners to store vocabularies in the long-term memory of the brain. Regarding language learning, Oxford (1990) also proposed that verbal concepts can be converted into pictures and that vocabularies and paragraphs can be transformed into images. Moreover, students clearly experience more stimulation when teaching content combines pictures and texts than when it includes only pictures or texts (Morgan, 1982; Nicholson, 1998). In addition, Dual coding theory, proposed by Paivio (1991), suggests that the message processing of the human brain operates through a dual system and

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