Situational Sets Effect on Role-Play Game Supported English for Specific Purposes Vocabulary Acquisition

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Abstract: The purpose of this study is to examine the effectiveness of using the Facebook online game, *ChefVille*, as an English learning tool to facilitate English for Specific Purpose (ESP) vocabulary acquisition. In addition, students' learning motivation toward the Facebook online game, *ChefVille* was studied. This game used situational sets in a role-play game (RPG) learning environment as ways of bringing words together so that students related words to the central concept. The instruments used include a questionnaire, and two vocabulary tests. The results confirmed that incorporating an online RPG-based method facilitated students' ESP vocabulary acquisition. It was also revealed that an online RPG-based learning method is effective in promoting motivation and changing attitudes toward vocabulary learning. The results derived from the experiment led to the conclusion that applying an online RPG-based learning strategy into ESP vocabulary learning can yield positive learning effect for the learners.

Keywords: RPG, situational sets, ESP, vocabulary acquisition

1. Introduction

With the rapid development of business communities around the world, English language skills have been considered an important tool needed to compete in the global economy. One of the goals of foreign language education identified by the Ministry of Education of Taiwan for vocational educational programs is to provide students with the foreign language ability and advanced professional knowledge necessary to succeed in the job market. This development trend has caused ESP instruction to be more greatly emphasized for the last few years at vocational schools in Taiwan (Johns & Dudley-Evans, 1991).

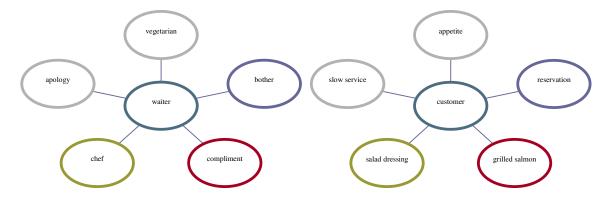
ESP is well known as a learner-centered and content-based approach to teaching English as a foreign language, which meets the needs of learners who need to learn English for use in their specific fields, such as business, science, technology, or academic learning. However, there are some problems in the development of ESP courses in Taiwan. Porcaro (2001) indicated that authentic materials and specific knowledge were not provided in ESP courses. Considering the problems for ESP development in Taiwan mentioned above, the aim of this study is first, to check if students acquire more ESP vocabulary using situational sets in an RPG learning environment, and second, to seek students' motivation toward the Facebook online game "ChefVille" as a tool to facilitate ESP vocabulary learning.

2. Related Work

By definition, English for Specific Purpose (ESP) is designed to meet specific needs of the learner (Dudley-Evans & St. John, 1998). ESP has some distinctive features with special attention to authenticity. Nunan and Miller (1995) define authentic materials as those which "were not created or edited expressly for language learners. Authentic materials illustrate how English is used naturally by native speakers." One of the most challenging tasks constantly facing ESP teachers is how to bring authentic materials into the classroom. With the advantage of RPG-based learning environment, students are able to develop their own strategies for dealing with real language and stimulate their motivation to learn.

Role-play games (RPGs), in which students are encouraged to come across different authentic materials related to their study subject, are highly graphical 2D or 3D video games played online allowing individuals to interact not only with the gaming software but also with the avatars of other players through their self-created digital avatars (Steinkuehler, 2003). Moreover, virtual learning in RPG environment provides a space for constructive learning and immerses learners in a meaningful communication simulated to authentic practices (Chuang, Chang & Chen, 2014). It is recommended that RPG be implemented in the contexts where students need to learn the knowledge and skills of English and practice them in authentic ways as they provide active interactions and collaborations among learners as well as address cognitive issues and foster active learning (Yip & Kwan, 2006).

Moreover, situational sets in vocabulary learning require the use of "general concepts" to bring together the specifics. It refers to the "cohesive chains" of relationships between words in a discourse. The technique stresses the need for using the context or situation in which words appear as an organizing principle. For example, cluster words such as *reservation*, *grilled salmon*, *salad dressing*, *appetite*, *and slow service* are revolved around the central concept *customer* in restaurant setting. The examples of situational sets were presented as the following (as shown in Figure 1).



waiter-oriented situational set

customer-oriented situational set

Figure 1. Examples for situational sets

3. Method

3.1 Research Design

The study was designed to answer the two following research questions: 1) Do students actually acquire more ESP vocabulary using situational sets in an RPG learning environment? and 2) What are students' motivation toward the Facebook online game "ChefVille" as a tool to facilitate ESP vocabulary learning? We investigated the first question by constructing and administering a special self-designed vocabulary test. Secondly, we investigated the second question via framing and implementing a self-designed questionnaire.

3.2 Procedure and Instruments

"ChefVille" is one of the English version games from Facebook. There were forty participants (experimental group) were assigned to engage in the learning environment compared to the other forty participants (traditional teacher-directed instruction). This game is not embedded in the learning class; it means that participants would utilize the game, as an English learning tool anytime and anywhere they like. The experimental sequence of the study took approximately twenty hours spread over one month. The game is regarded as participants' additional English learning tool; therefore, they are expected to learn with no stress and are supposed to learn autonomously and acquire vocabulary spontaneously. Therefore, there is no strict time restriction; participants can decide how many days and for how long they would like to spend their time playing the game, but they must use it at least four hours a week. "ChefVille" lets users run their own restaurant, do the shopping, enquiry and purchase, make dishes, and serve the dishes to build up their unique restaurants (as shown in Figure 2). In addition, it may be a feasibly situated learning environment for problems solving and tasks completion in order to achieve a goal (as shown in Figure 3)



<u>Figure 2</u>. Authentic task-based scenario in the game



<u>Figure 3</u>. Goal-based interaction for situated learning in the game

The instruments used consisted of two sections. Section 1 aimed to estimate participants' current English vocabulary size in order to do a comparison with the vocabulary acquisition

achievement after the learning environment. The vocabulary tests were administered as the pre-test, the immediate post-test, and the delayed post-test. The content of testing items were the same, but the sequence of the items was dissimilar. Example for the testing items was presented as bellows (as shown in Table 1).

The participants had 50 minutes to finish the vocabulary test divided into two parts. The first part of the test was a recognition test containing ten items of matching English vocabulary with Chinese in a traditional vocabulary recognition test form. The second part of the test contained ten questions testing sentence comprehension and vocabulary, which are randomly chosen from *ChefVille*'s daily questions. The test design aimed to provide learners with the closest simulation of the game's format with the concern of decreasing test-takers' anxiety in order to assess their authentic performance. The total points of the test were 50 each.

Table 1: Example for vocabulary test items.

Part 1: Matching English vocabulary with	Part 2: Please choose the right answer
Chinese	
Examples:	Examples:
1.()(1)vegetarian	1. () Which of the following is not found in
() (2)bartender	basic mayonnaise?
() (3)appetite	a) egg b) oil c) milk
() (4)chef	2. () Which ingredient is not present in Pat's
() (5)cashier	inventory?
(A)主廚 (B)食慾;胃口 (C)出納(員)	a) wheat bread b)lettuce c) milk
(D)素食者;素食的 (E)酒保	
Total: 50 points (5 points for each item)	Total: 50 points (5 points for each item)

In Section 2, in an attempt to obtain participants' motivation and vocabulary learning effectiveness, the questionnaire distributed to explore the participants' learning motivation of toward the Facebook online game "*ChefVille*" as a vocabulary learning tool over an extended period of time, revealing their learning situation as well as personally significant transformations.

The questionnaire classifies the features of motivation toward the Facebook online game "ChefVille" as a tool to facilitate ESP vocabulary learning into the following five factors: personal interest, external expectations, learning achievement, social contact and social stimulation.

4. Discussion and Conclusion

This study investigated the effectiveness of using the Facebook online game, *ChefVille*, as a learning tool to facilitate ESP vocabulary acquisition, and students' motivation of English learning using *ChefVille*. In accordance with the results and discussion, several major conclusions are made.

First of all, the results indicated that situational sets with RPG support are beneficial to students' ESP vocabulary acquisition. According to the finding of the study, the experimental group (RPG-enhanced instruction) reached higher scores than the control group (teacher-directed instruction). Much difference was found in two vocabulary test scores across the two learning conditions. In terms of motivation, the students scored highest on the scale of "Social Stimulation" followed by the "Social Contact", indicating that the sociocultural approaches linking to students' daily life experiences might be able to foster students' motivation toward situational sets with RPG support learning. The use of online RPG-based learning environment can promote students' willingness to learn. Most of the students possess good attitudes and hold positive perspectives toward online RPG-based English learning. Some of the limitations of this study could serve as future directions for conducting related studies. The newly developed Motivation toward RPG Situational Sets Learning Survey should be validated with a larger sample across different grade-levels and with a more rigorous method such as confirmatory factor analysis. Moreover, as previously mentioned, researchers can adopt qualitative or mixed methodologies to explore students' motivation toward situational sets with RPG support learning from different perspectives and identify additional scales.

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