Student engagement in learning vocabulary with CALL

Robert Stroud

Abstract. Ensuring that students are engaged in learning is a key concern for instructors across many fields. With regards to vocabulary in language learning, teachers should provide students with tasks which promote high levels of motivation and resultant engagement. The recent trend of online systems which have dynamic, collaborative, and even competitive style approaches can potentially take students to new levels of physical and psychological engagement in and out of the classroom. Despite newfound enthusiasm for such systems, there is currently little data regarding student engagement in using such systems when compared to textbooks or other more traditional paper-version approaches. Recent survey data from 131 Japanese university students on the use of a vocabulary learning system (Quizlet, http://quizlet.com) was collected. Findings unsurprisingly showed a clear improvement in the overall engagement of students through using an online system to learn vocabulary. However, a great deal more research is needed to ensure that such engagement amongst students actually leads to better learning and acquisition of words compared to traditional paper-based learning methods.

Keywords: engagement, motivation, flow, CALL, vocabulary.

1. Introduction

Teachers can often confuse the word engagement in learning with others such as motivation and participation, which are often judged based upon observable actions of students. Engagement however, also considers the factors in learning which can remain hidden from the view of a teacher. According to Fredericks, Blumenfeld, and Paris (2004), the three elements which make up engagement

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are (1) behavioral (the actions they undertake), (2) emotional (their enjoyment and feeling towards doing work) and (3) cognitive (how much effort they invest to learn and retain material). It is important for students to experience all levels of such engagement, for example during the learning of new vocabulary, so as to best improve their chances of noticing and retention. With the use of modern technology, the recent creation and incorporation of online vocabulary learning systems into academic settings has been a positive step towards enhancing student engagement to motivate students to focus more deeply upon their learning.

Research on the improvement and maintenance of student engagement in class has often had similar findings in factors which are crucial for students to become focused upon tasks at hand. These have included students having a sense of control (Egbert, 2003) and elements which grab the attention and interests of the student (Keller, 2000), ultimately resulting in an undisturbed state of focus called flow (Csikszentmihalyi, 1997). Stroud (2013) recently developed the CARCS model to improve the motivational design of classroom tasks for students with the ultimate goal of increasing and maintaining student engagement across time. He focused on improving student engagement in classroom tasks by offering Control (C), grabbing Attention (A), matching Relevant task content (R), building Confidence (C), and giving a Satisfying outcome (S) to learners. The same theory can apply to vocabulary learning with the aid of modern technology (in comparison to self-learning of vocabulary, with textbooks for example).

One recent website in widespread use in language learning is Quizlet. The system offers learners the chance to build their own card sets online and learn them through playing games. Online systems such as Quizlet offer students more chances for control (with the words they study, games they play, as well as place and method of access to their cards), attention (with graphics and scores to grab their focus), relevance (with system feedback telling students their weak points and needs for study focus from game scores for example), confidence (with measurable progress being made through scores), and satisfaction (with competitions and game rankings between different class members). However, little research has been done on examining the details of the behavioral, emotional and cognitive engagement which may result from the implementation of such a system. A recent study which focuses upon these three elements will now be discussed.

2. Method

70 first year and 61 second year non-English major students studying in English writing courses in a Japanese university took part in the study. All the students were
Japanese nationals with English as a second language and were of mixed gender. All of the students used Quizlet instead of textbooks, which was the primary method for all of the students up until that time, as the tool for vocabulary study across a 14 week semester. At the end of each class, the students were given 10 minutes to enter new words from the class content and then another 20 minutes to play games of their choice on Quizlet to study their word sets. At the end of the course a survey was administered to the students regarding feelings towards study using Quizlet.

3. Results and discussion

3.1. Emotional engagement

Table 1. Using Quizlet to study vocabulary was more fun than using my textbooks…

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>2%</td>
<td>3%</td>
<td>4%</td>
<td>17%</td>
<td>34%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Students answered the above question post-course and it was clear that most students felt using Quizlet to study vocabulary was a more enjoyable method than using a textbook. This suggests that the majority of students were more emotionally engaged in learning due to the incorporation of the system into the course.

3.2. Cognitive engagement

Table 2. Using Quizlet made me try harder to remember vocabulary than with my textbooks…

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1%</td>
<td>4%</td>
<td>8%</td>
<td>50%</td>
<td>23%</td>
<td>14%</td>
</tr>
</tbody>
</table>

An additional question answered by the students post-course also makes clear that using Quizlet made the majority of the students try to remember the vocabulary sets they had made and practiced more than with a textbook they had previously used.

This suggests that students were paying more attention to their learning, perhaps making a larger effort to remember words in order to get higher scores in the games they played, and were thus more cognitively engaged when using the online learning system compared to previous learning with textbooks.
### 3.3. Behavioral engagement

Table 3. During the weekly 20 minutes of game time with Quizlet, how often did you usually play the following games?

<table>
<thead>
<tr>
<th>Quizlet game</th>
<th>Practice type</th>
<th>Average usage score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashcards</td>
<td>Reading (receptive)</td>
<td>1.77</td>
</tr>
<tr>
<td>Scatter</td>
<td>Reading (receptive)</td>
<td>3.76</td>
</tr>
<tr>
<td>Space Race</td>
<td>Writing (productive)</td>
<td>2.63</td>
</tr>
<tr>
<td>Learn</td>
<td>Writing (productive)</td>
<td>2.10</td>
</tr>
<tr>
<td>Speller (without headset)</td>
<td>Reading into Writing (productive)</td>
<td>1.26</td>
</tr>
<tr>
<td>Speller (with headset)</td>
<td>Listening into Writing (productive)</td>
<td>2.12</td>
</tr>
<tr>
<td>Test</td>
<td>Reading / Writing (receptive / productive)</td>
<td>1.89</td>
</tr>
</tbody>
</table>

During the 20 minutes of post-class Quizlet game time allocated by the teacher, students were free to choose any of the available system games to study their card sets. Table 3 above shows an overview of the differences between student preferences with this freedom of choice and the differences of focuses on language skills practiced (receptive versus productive). Although student behavioral engagement was often very high during practice time (due to the freedom of study choices of fun games which Quizlet offers), allowing students to practice their cards sets without any guidance from the teacher or system might have slightly limited students’ progress. Students may have perhaps focused on games they enjoyed playing or specific vocabulary they were good at getting high scores with, rather than focusing on improving their weaker language skills, or vocabulary for example.

### 4. Conclusions

It is not surprising from the results that switching learners to using online vocabulary learning systems such as Quizlet can increase the behavioral, emotional, and cognitive engagement of classes compared to more traditional methods such as textbooks. This clearly has the potential to improve learners’ learning, with higher acquisition and potential retention of vocabulary. However, it should not be assumed by teachers that high levels of observable participation of their students during class will result in efficient learning of vocabulary (where time spent
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studying vocabulary is resulting in better learning and acquisition of those words than with other approaches). Although the introduction of engaging task elements such as choice, competition and autonomy may result in higher motivation and resultant engagement of students, teachers still need to consider guiding students on the structure of practice they are undertaking to learn vocabulary (with regards to the skills being used, recycling of difficult words and spacing of repetition for example). This way, the obviously engaging elements that systems such as Quizlet offer can be utilized to create focused and effective vocabulary learning environments for language learning classrooms.

References