The Effect of Theme Preference on Academic Word List Use: A Case Study of Smartphone Video Recording Feature

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Abstract
67 Japanese English as a Foreign Language undergraduate learners completed one smartphone video production per week for 12 weeks, based on a teacher-selected theme. Designed as a case study for this specific context, the data collected on a weekly basis students Academic Word (AWL) use and their perception of the theme, as well as data pertaining to theme evaluation in a post-intervention survey. The analysis compared the mean use of academic words against the various themes to determine their effect on AWL use. The findings indicate that there is a correlation between theme preference and the use of lexical items from the Academic Word List. The outcome from this research indicates that smartphone video recording feature can be used to engage language learners to speak in the target language about themes that are relevant to them and thus increase speaking abilities and word usage.
Introduction

The emergence and the mobility of smartphone technology have stimulated educator interest to consider new teaching practices for exposing language learning content to students. Short Message Service (SMS) has received to date the most attention because it is easier to control the amount of text input, purposes and tasks students must complete, as well as to control the amount and the quality of text output (see for example Levy & Kennedy, 2005; Thornton & Houser, 2005; or Stockwell, 2010). Another smartphone feature that has received some attention is the photo camera feature available on most smartphones. Research concerning smartphone photography has gained research interest (Foster, 2009; Gai, 2009; Gye, 2007; Hjorth, 2007; Kato, Okabe, Ito & Uemoto, 2005; Reading, 2008; Scifo, 2009). In Turkey for example, Uzunboylu, Cavus and Erçag (2009) have used the smartphone photo taking feature to engage undergraduate students to document and share visual evidence of environmental degradation for discussion on a project website. Both of these features require the smartphone subscriber to use and send SMS, therefore relying primarily on writing to share content with peers. Due to technology advancements it might be possible to consider the benefits of using the smartphone video recording feature as a potential learning tool.

Viewing videos on smartphones

Some researchers have developed interest in understanding the effect of viewing videos on smartphones. For example, Lee et al.’s (2011) results indicated that volunteering participants were able to understand and enhance their ability to perform CPR after viewing demonstrations on cellular phones. Similarly, Fiore-Silfvast et al. (2013) reported that viewing videos on smartphones was an effective method for midwives to disseminate information to patients. Hansen, Kortbek and Gronbaek (2013) used the smartphone video viewing feature to expose tourists to mobile urban drama and storytelling. Most research on the use of the smartphone video feature place the phone subscribers in the position of viewers of third party produced video content. However, research by Gromik (2008) suggests that it might be possible to use the smartphone video recording feature as a learning tool to increase target language exposure.

Using smartphones to produce videos

Video production has been used extensively in a wide range of educational settings and for various learning objectives. For example, Leijen, Lam, Wildschut, Simons and Admiraal (2009) engaged dance students to use filming and editing to reflect and comment on their dancing performances. Gromik (2008) reports on the literature to reveal that filming can be used as reflective diaries to promote reflective learning development. Researchers have found that making reflective videos can benefit both teachers (Barton & Haydn 2006; Gebhard 2005) and students (Triggs & John 2004). As the literature asserts, the ability to see oneself perform can be beneficial and revealing for a learner (Hoelker, Nimmannit, & Nakamura 1999; Leijen et al. 2009; Liu 1997). Levy and Kennedy (2005) used computer video capture to record students’ behavior during their audio conferencing study of Italian as a foreign language to provide evidence for this assertion within the specific context of the language learning classroom. The researchers found that these recordings became an effective tool for
assisting students in visualizing and subsequently correcting their errors. However, as
the research by Levy and Kennedy (2005) reveals, using digital video cameras even
handheld can be cumbersome to carry and use. Technology advancements of
smartphones and its video recording feature could be used as a language learning tool.

The use of the smartphone video recording feature has received little attention from
the research community. Yet as Gromik’s (2009) study demonstrated, it was possible
for university students to use the video recording feature on their smartphones to
produce speaking performances to share with their teacher. Maxfield and Romano
(2013) also reported on the possibility for pre-service teachers to use the video
recording feature on their iPads to “capture the first day of school experience” to then
create a “combined video montage” to share with their peers (p. 140). Smartphone
developments combined with social networking site afford learners the opportunities
to share their opinions using a range of options; audio-visual recordings being one of
them.

**Theoretical Framework**

The concept of creating videos with a smartphone involves students using the tool to
produce content. Such method reflects the practice of socio-constructionism theory
(Papert, 1991), which asserts that it is through interaction and collaboration with
peers, and the use of tools from the natural context and environment, that learners
negotiate and gain new knowledge (Vygotsky, 1978). The emergence of mobile
technology and the many features they carry, enable smartphone subscribers to use
these features to collect data, information, still or moving images and record audio or
audio-visual evidence they can use to acquire, understand and retain content that is
relevant to them or to their learning and to share this digitally recorded data with
peers through social networking sites. Vygotsky’s claim was that students learned
anytime anywhere in and outside of class time. Applying a socio-constructionist
framework would lead to the hypothesis that with the emergence of more powerful
smartphones learners could capitalize on their learning experiences outside class and
share these with their peers, thus increasing the construction of knowledge and
content through social exposure and reflections.

**Context**

Japanese learners of English receive six years of English exposure prior to
commencing their university education (Gromik, 2006; Hirata & Hirata, 2007;
Stapleton, 2005). During these six years and their first year of university English
education, Japanese students deepen their knowledge and expertise with writing and
reading comprehension and cognizance of grammar rules more than with speaking
ability (Johnson & Hefferman, 2006; Yamada & Akahori, 2007). Thus learning
English in Japan is much a memorization activity, which may provide learners very
little motivation to retain and apply these individual lexical items in speaking
activities. Learning a language can be demotivating and language forgotten.

For this reason, introducing the smartphone video recording feature needs to be
embedded in an activity that will motivate the students to use the technology, the
language, learning strategies and speaking skills in order for the learning to be
beneficial.
**Authentic Learning**

Authentic learning places the learner in the position of producer through activities such as role-play, problem or case-based learning in a real-world context and environment (Gulikers, Bastiaens & Martens, 2005; Lombardi, 2007; Reeves, Herrington & Oliver, 2002). By engaging students to produce content from real-world experiences or observations they are able to perceive a problem, think of a solution and demonstrate the implication of their opinion (Lombardi, 2007). Completing such an activity could have more relevance to the learner because it provides them with the opportunity to define, investigate and apply their prior knowledge and skills in order to “create polished products valuable in their own right” and to share this product with peers (Reeves, Herrington & Oliver, 2002, p. 564). Not only can students collaborate in the production process, but the production outcome can become a shared item that encourages students to reflect on possibilities for improvement.

Integrating authentic learning as part of the smartphone video production task may engage learners to apply their prior language skills and competencies to give them the confidence to speak in the target language about meaningful content of importance to them. The use of the technology enables learners to produce authentic audio-visual documentation about their exploration of real-life issues or themes (Gulikers et al. 2005).

**Theme-based Learning**

Theme-based learning is “structured around topics relevant to the students’ experience” (MacDonald, Badger, & White, 1999, p. 87). Theme-based learning enables students to consider a theme, and to rely on their prior knowledge and experiences in order to produce a new form of knowledge or interpretation based on the students’ interests (Huang, Liu, Chu & Cheng, 2007). Using the smartphone video recording feature, students could observe, record and construct knowledge that would provide video evidence of their ability to apply their prior knowledge of content and target language to discuss an issue relevant to them. Blending theme-based learning with smartphone video filming places greater emphasis on student-centered learning. Cummins and Swain (1986) add that theme-based learning enable learners to produce their language output within the context they live (see also Chaplin & Manske, 2005). These authors state that “in context-embedded communication … the language is supported by a wide range of meaningful paralinguistic and situational clues” (p. 152). While learners are provided with the themes, they have to interpret their understanding of the theme, select the location and content to be discussed on their video, and use the target language to express their opinion effectively. Such a learning method, according to Chaplin and Manske (2005), enables students to be more motivated as the theme connects their personal interest with relevant course specific issues.

The outcome of using theme-based learning is that students will interpret the theme differently and thus will use different visual cues as well as opinions regarding the selected theme. Once students share their videos with their peers, the viewers are exposed to a great range of opinions and interpretations, as well as exposed to a greater range of target language expressions and creative output.
The theme and the smartphone video recording feature enable learners to immerse into their social environment, to negotiate meaning and intentions and thus gain new knowledge and understanding of the target language and their ability to express their opinion effectively.

**Filming and language production process**

Producing a video is a complex process that involves addressing an issue or expressing an opinion, remembering the speech and speaking in the target language, filming and framing the necessary visual cues, recording, and reflecting on the whole performance output (Gromik, 2009; Hansen et al. 2013). With a smartphone there may not be a need to edit a short video, however if the producer is not satisfied with the performance, after reflecting on the visual output, he/she may have to record the whole scene again. Such video production method fits with the language learning approach, whereby students need to plan, perform and reflect on their performance in order to feel confident that this is the best they can do. Viewing their performance enables them to listen to their opinion in order to ensure that they are satisfied with their response. If the students are not satisfied with their performance, they can then review their notes, fix their speech and improve the content they are discussing.

**Research Question**

This paper investigates the effect of theme-based learning on academic word use per smartphone video-produced performance output. The preposition suggests that due to the degree of theme difficulty, students are more likely to use a greater number of academic words to express their opinion regarding such topic.

**Methodology**

**Participants**

67 Japanese undergraduate English language learners consented to participate in this research (M= 59, F= 8). The participants’ age ranged from 19 to 22 years old with the mean being 20 years old. The number of Arts & Letters students registered in the course was 22 male and 3 female students. From the Law department, there were 18 male and 4 female students. While there were no females in the Engineering A group (n=11), there were 8 male and 1 female in the Engineering B group.

**Task**

Students were required to produce one weekly video performance using their smartphone video recording feature and to email this performance to the teacher for review. At the beginning of the semester, students were provided with the list of all the themes they would need to discuss (see Table 1 below. To ensure that students had some prior understanding of the themes, these were included as part of the classroom activities (either for analysis or discussion).
Week | Theme
--- | ---
1 | What do you think of this course? (beginning of term)
2 | What did you do during golden week?
3 | What did you think of the speaking style?
4 | What did you think of the content?
5 | How will you improve your next presentation?
6 | Describe your favorite shop in town
7 | Describe your favorite painting
8 | How would you save the environment?
9 | Describe your favorite intention
10 | What do you think of peer presentation?
11 | What will you do during the summer holiday?
12 | What do you think of the course? (end of term)

Table 1. Weekly themes

Students had three days to prepare, video record their best performance, and submit their final production. Students received no assistance from the lecturer. They could communicate with their peers to discuss best video production practices, and they could reflect on their peer’s performances to improve their video production and speaking skills.

**Data Collection Method**

Given the specific context, the innovative use of the smartphone video recording feature and learning method, case study research is preferable for investigating the use of the smartphone video recording feature as a language learning tool by Japanese undergraduate (Verschuren, 2003).

Quantitative data were collected via a post-intervention survey, weekly diaries as well as students’ video recorded speaking performances. The post-intervention survey included 29 items (20 closed questions and 9 open-ended questions). The weekly diaries aimed to collect information concerning students’ preparation, recording practice, speech memorizing strategies, and a rating of the whole video production process. The evidence of the weekly video speaking performances was transcribed and collected. This set of evidence included students’ speaking time, and the amount of words spoken per second. The lexical items used by students in their video was also gathered and analysed in term of the first 1000 words, the second 2000 words and items from the Academic Word List (Cobbs, n.d.)

**Data Analysis**

A mixed model analysis of the data was conducted with SPSS 21. The Academic Word List was identified as the dependent variable. Theme preference, error recognition, enjoyment rate, perception of the benefits of producing smartphone videos on a regular basis, the theme approach, technology evaluation, technology use difficulties, ratings of the video and audio recording quality, preparation and speech preparation and production strategies, preparation time at five minute intervals were labeled independent variables. The statistical analysis aims to identify the variable that led to the increase use of lexical items from the Academic Word List.
Table 2. Total word range used over 12 weeks.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total K1000</td>
<td>67</td>
<td>35.1448</td>
<td>6.75157</td>
</tr>
<tr>
<td>Total K2000</td>
<td>67</td>
<td>3.9701</td>
<td>.97622</td>
</tr>
<tr>
<td>Total Academic Word List</td>
<td>67</td>
<td>1.0336</td>
<td>.46331</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 above represents the descriptive statistics of the total range of words used by students in their speech performances over a twelve-week period. This evidence confirms that students used a greater range of K1000 words in all of their speech performances. However, the research investigates the effect of the theme on the use of AWL lexical items.

Table 3 below provides an overview of the maximum number of AWL lexical items used per themes. It is noticeable that themes 4, 7, 8 11 and 12 engaged the participants to place more focus on the use of AWL vocabulary.

<table>
<thead>
<tr>
<th>Theme 1 (T1) AWL (raw score)</th>
<th>T2 AWL (raw score)</th>
<th>T3 AWL (raw score)</th>
<th>T4 AWL (raw score)</th>
<th>T5 AWL (raw score)</th>
<th>T6 AWL (raw score)</th>
<th>T7 AWL (raw score)</th>
<th>T8 AWL (raw score)</th>
<th>T9 AWL (raw score)</th>
<th>T10 AWL (raw score)</th>
<th>T11 AWL (raw score)</th>
<th>T12 AWL (raw score)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>.85</td>
<td>.55</td>
<td>.75</td>
<td>.823</td>
<td>1.82</td>
<td>.90</td>
<td>.36</td>
<td>.66</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1.077</td>
<td>.840</td>
<td>.823</td>
<td>1.651</td>
<td>1.651</td>
<td>.940</td>
<td>.569</td>
<td>1.081</td>
<td>2.00</td>
<td>1.032</td>
<td>1.079</td>
<td>1.094</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 3. Total of AWL per theme

To provide an example of K1000, K2000 and AWL lexical items, two student samples are provided. In Sample 1 below, the words in bold represent off list words, that is word that the software cannot recognize. In this instance Sendai is the capital city of the Tohoku region and Seiyu is a national store. The word in bold, and italics (beneficial) represents a word from the Academic Word List. The words underlined represents the K1000 words and the words in italics represent the K2000 words, that the student used do address the theme, describe your favorite shop in Sendai, the theme for week six.
My favourite shop in Sendai is Seiyu. I always buy foods and drink at Seiyu. Seiyu is necessary in my daily life; Seiyu has two beneficial points. First it is convenient because Seiyu is open around the clock; second goods at Seiyu are cheap. If I save the cost of foods I can buy other things so I will continue to go shopping.

In other words the statement above has 37 K1000 words, 5 K2000 words and one AWL item. In contrast the following statement below has 35 K1000 words, 4 K2000 words and 4 AWL items.

Today I would like to talk about how will I save the environment. When I go outside for example, to go shopping, I ride the bicycle more than my motor bicycle. My motor bicycle makes CO2 so to ride motor bicycle promotes global warming. In conclusion motor bicycle is very useful thing but for the environment we need to think which we should use. thank you.

Both statements above lead to observation that, first the use of AWL items is dependent on students’ needs and second is related to the theme. However, it could be argued that the selection of words is accidental. Nonetheless the theme engages students to use K1000 and K2000 words that they are familiar with and may have prior knowledge of, and they independently begin to investigate new lexical items necessary to tell their story.

**Type III Tests of Fixed Effects**

<table>
<thead>
<tr>
<th>Source</th>
<th>Numerator df</th>
<th>Denominator df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1</td>
<td>75.879</td>
<td>.198</td>
<td>.657</td>
</tr>
<tr>
<td>Theme</td>
<td>11</td>
<td>654.736</td>
<td>11.98</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test Theme Preference</td>
<td>2</td>
<td>688.694</td>
<td>2.943</td>
<td>.053</td>
</tr>
<tr>
<td>Errors reported per week</td>
<td>1</td>
<td>679.751</td>
<td>1.77</td>
<td>.259</td>
</tr>
<tr>
<td>Rating of enjoyment per week</td>
<td>1</td>
<td>449.062</td>
<td>.035</td>
<td>.851</td>
</tr>
<tr>
<td>Impact of regularity of production</td>
<td>1</td>
<td>44.728</td>
<td>.670</td>
<td>.417</td>
</tr>
<tr>
<td>Impact of regularity of theme</td>
<td>1</td>
<td>49.104</td>
<td>1.616</td>
<td>.210</td>
</tr>
<tr>
<td>Perceived improvement in pronunciation</td>
<td>4</td>
<td>50.313</td>
<td>.870</td>
<td>.488</td>
</tr>
<tr>
<td>Perceived improvement speaking without notes</td>
<td>3</td>
<td>53.548</td>
<td>.775</td>
<td>.513</td>
</tr>
<tr>
<td>Impact of teacher evaluation</td>
<td>1</td>
<td>46.744</td>
<td>.011</td>
<td>.917</td>
</tr>
<tr>
<td>Impact of technical difficulties</td>
<td>1</td>
<td>50.370</td>
<td>.260</td>
<td>.612</td>
</tr>
<tr>
<td>Audio quality rating</td>
<td>2</td>
<td>46.615</td>
<td>.146</td>
<td>.864</td>
</tr>
<tr>
<td>Video quality rating</td>
<td>2</td>
<td>47.194</td>
<td>.167</td>
<td>.847</td>
</tr>
<tr>
<td>Recording</td>
<td>12</td>
<td>686.519</td>
<td>.468</td>
<td>.933</td>
</tr>
<tr>
<td>Preparation strategy</td>
<td>5</td>
<td>627.957</td>
<td>.628</td>
<td>.678</td>
</tr>
<tr>
<td>Speaking strategy</td>
<td>8</td>
<td>683.605</td>
<td>.823</td>
<td>.582</td>
</tr>
<tr>
<td>Speech production strategy</td>
<td>17</td>
<td>684.395</td>
<td>.822</td>
<td>.668</td>
</tr>
</tbody>
</table>
Table 4 above, reports on the Fixed Effects analysis used to determine the impact of certain constant variables over time. As this Table indicates there is a statistical significance with the theme as a major influencing factor for the use of lexical items from the Academic Word List (F= 11.98, p= .000). The next possible influencing factor could be the preparation time (F= 3.29, p= .071). The evidence suggests that the estimate of fixed effect was .033, indicating that at five minute intervals of preparation time a student would need 2 hours and 54 minutes to include and use 1 academic word in their speech. Therefore preparation time would not be considered a near significant influencing variable to engage the students to use more academic words.

Each video performance was transcribed and the lexical items were grouped. All academic words for each theme per week were tabulated, analyzed and the mean reported in Table 5 below.

**Estimates**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Mean</th>
<th>Std. Error</th>
<th>df</th>
<th>95% Confidence Interval Lower Bound</th>
<th>95% Confidence Interval Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you think of this course (beginning of term)</td>
<td>.089</td>
<td>.536</td>
<td>78.965</td>
<td>-.977</td>
<td>1.155</td>
</tr>
<tr>
<td>What did you do during golden week</td>
<td>-.090</td>
<td>.538</td>
<td>79.957</td>
<td>-1.162</td>
<td>.982</td>
</tr>
<tr>
<td>What did you think of the speaking style</td>
<td>.118</td>
<td>.538</td>
<td>80.105</td>
<td>-.953</td>
<td>1.189</td>
</tr>
<tr>
<td>What did you think of the content</td>
<td>1.234</td>
<td>.544</td>
<td>83.123</td>
<td>.151</td>
<td>2.316</td>
</tr>
<tr>
<td>How will you improve your next presentation</td>
<td>.265</td>
<td>.549</td>
<td>85.525</td>
<td>-.826</td>
<td>1.356</td>
</tr>
<tr>
<td>Describe your favorite shop in town</td>
<td>-.189</td>
<td>.550</td>
<td>86.462</td>
<td>-1.283</td>
<td>.905</td>
</tr>
<tr>
<td>Describe your favorite painting</td>
<td>.125</td>
<td>.546</td>
<td>84.219</td>
<td>-.961</td>
<td>1.212</td>
</tr>
<tr>
<td>How would you save the environment</td>
<td>1.439</td>
<td>.543</td>
<td>82.674</td>
<td>.358</td>
<td>2.519</td>
</tr>
<tr>
<td>Describe your favorite intention</td>
<td>.359</td>
<td>.539</td>
<td>80.210</td>
<td>-.713</td>
<td>1.431</td>
</tr>
<tr>
<td>What do you think of peer presentation</td>
<td>.773</td>
<td>.547</td>
<td>84.576</td>
<td>-.315</td>
<td>1.861</td>
</tr>
<tr>
<td>What will you do during the summer holiday</td>
<td>.485</td>
<td>.545</td>
<td>83.641</td>
<td>-.599</td>
<td>1.570</td>
</tr>
<tr>
<td>What do you think of the course (end of term)</td>
<td>.814</td>
<td>.545</td>
<td>83.144</td>
<td>-.271</td>
<td>1.898</td>
</tr>
</tbody>
</table>

a. Dependent Variable: T1 - Academic Word List word group (raw score).
b. Covariates appearing in the model are evaluated at the following values: preparation time of 5 minute interval = 6.3302.
Table 5. Mean estimate of AWL items used
As the evidence on Table 5 above suggests, the theme “How would you save the environment?” indicates a high mean score of 1.439. Amongst the twelve themes, the environment theme seems to be a high influencing factor for the use of lexical items from the Academic Word List. By contrast the theme “Describe your favorite shop in town” has a negative mean score (M= -.189) indicating that this theme did not engage students to increase their use of lexical items from the Academic Word List.

Since the theme “How would you save the environment?” was the most influential, a Pairwise Comparison using Bonferroni analysis was conducted to analyze the significant difference between this theme and all the other themes.

<table>
<thead>
<tr>
<th>Theme (I)</th>
<th>Themes (J)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Df</th>
<th>Sig.</th>
<th>95% Confidence Interval for Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>How would you save the environment</td>
<td>What do you think of this course Week 2?</td>
<td>1.349*</td>
<td>.226</td>
<td>672.308</td>
<td>.000</td>
<td>.586</td>
</tr>
<tr>
<td></td>
<td>What did you do during golden week?</td>
<td>1.529*</td>
<td>.222</td>
<td>668.873</td>
<td>.000</td>
<td>.776</td>
</tr>
<tr>
<td></td>
<td>What did you think of the speaking style?</td>
<td>1.321*</td>
<td>.205</td>
<td>654.057</td>
<td>.000</td>
<td>.628</td>
</tr>
<tr>
<td></td>
<td>What did you think of the content?</td>
<td>.205</td>
<td>.200</td>
<td>648.137</td>
<td>1.000</td>
<td>- .473</td>
</tr>
<tr>
<td></td>
<td>How will you improve your next presentation?</td>
<td>1.174*</td>
<td>.202</td>
<td>649.025</td>
<td>.000</td>
<td>.492</td>
</tr>
<tr>
<td></td>
<td>Describe your favorite shop in town</td>
<td>1.627*</td>
<td>.207</td>
<td>651.074</td>
<td>.000</td>
<td>.928</td>
</tr>
<tr>
<td></td>
<td>Describe your favorite painting</td>
<td>1.313*</td>
<td>.206</td>
<td>651.001</td>
<td>.000</td>
<td>.617</td>
</tr>
<tr>
<td></td>
<td>Describe your favorite intention</td>
<td>1.080*</td>
<td>.204</td>
<td>651.589</td>
<td>.000</td>
<td>.390</td>
</tr>
<tr>
<td></td>
<td>What do you think of peer presentation?</td>
<td>.665</td>
<td>.202</td>
<td>649.802</td>
<td>.069</td>
<td>-.019</td>
</tr>
</tbody>
</table>
Based on estimated marginal mean
* The mean difference is significant at the .05 level.

a. Dependent Variable: T1 - Academic Word List word group (raw score).
c. Adjustment for multiple comparisons: Bonferroni.

Table 6. Bonferroni analysis

<table>
<thead>
<tr>
<th>Question</th>
<th>t value</th>
<th>p value</th>
<th>F value</th>
<th>p value</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>What will you do during the summer holiday?</td>
<td>.953*</td>
<td>.205</td>
<td>651.817</td>
<td>.000</td>
<td>.258</td>
<td>1.648</td>
</tr>
<tr>
<td>What do you think of the course Week 13?</td>
<td>.625</td>
<td>.203</td>
<td>655.143</td>
<td>.143</td>
<td>-.062</td>
<td>1.312</td>
</tr>
</tbody>
</table>

Table 6 above reveals that compared to the other themes, the theme “How would you save the environment?” significantly engages students to use more lexical items from the Academic Word List. However there is no significant difference between the environment theme and the theme “What did you think of the content of your peers’ presentation?” (p= 1), “What do you think of the course? Week 13” (p=.143) and “What do you think of your peers’ presentations” (p=.069), indicating that these three themes may have the potential to engage students to include more lexical items from the Academic Word List in their speech.

**Discussion**

In traditional methods of teaching and learning, content and drills are usually central to the task. For example, In Stockwell’s (2010) task, students were engaged to learn lexical items and to demonstrate their comprehension of these items. However the objective of theme-based learning is to position the student at the center of their learning and to engage them to rely on their prior knowledge of the lexical items, the content and to express their opinion about a particular theme to explore new forms of knowledge (Pica, 1987).

The emergence of computationally powerful smartphones means that students can learn anytime, anywhere and at their own pace. Using the video recording feature infers that students can begin to reflect on their experiences with their surroundings and peers to discuss their opinions. Such a learning method aligns with the socio-cultural theory, which stipulates that learners are not empty vessels and therefore through interaction with socio-economic and cultural environment they can begin to extrapolate and interpret information of importance to them.

The evidence suggests that some of the themes did engage (or disengaged) these particular participants from using lexical items from the Academic Word List. While the evidence indicated that one particular theme afforded students greater opportunities to use AWL items, other themes seemed to have limited effect on the use of AWL items. On the contrary, it would appear that easier themes promote a greater use of K1000 and K2000, indicating that these themes engaged students to use their prior knowledge of the target language extensively and thus resulted in
participants using lexical items they were already familiar with, rather than utilizing more advanced words.

Duquette, Renie and Laurier (1998) asserted that the use of visual cues such as still or animated images engaged learners to acquire lexical items (cited in Smidt & Hegelheimer, 2004, p. 519). The creation of smartphone-based video recorded speaking performances to discuss an issue regarding a particular theme can engage learners to increase their confidence in using a wide range of K1000 and K2000 lexical items. However, further research is needed to investigate the careful selection of themes that would require the use of AWL lexical items.

**Limitations**

As a case study, the experience of this small sample group limits the generalizability of the findings. In addition, the research did not explicitly identify whether or not students used Academic words implicitly or explicitly and whether they recycled any of the vocabulary they had acquired. Laufer and Hulstijn (2001) assert that accidental vocabulary acquisition is “the learning of one thing, for example vocabulary, when the student’s primary objective is to do something else” (p.10). While the evidence suggests that the theme has influenced learners to increase their use of Academic Words List items, the retention of these lexical items remains to be investigated.

**Conclusion**

Increasingly smartphone are becoming more powerful and include a wider range of features, which enable subscribers to complete a wider range of activities on this device. For example subscribers can now take photos or videos of information available in their surroundings to share with their peers on social networking sites. Given these affordances and potentials, this paper investigated the use of the smartphone video recording feature as a tool to produce student-centered performances. While previous research have investigated the educational benefits of delivering content via sms to students, few have reported on the merits of the smartphone video recording feature. This paper investigated the effect of them-based learning on the use of lexical items from the Academic Words List (AWL). The results support that providing relevant themes will engage students to use more AWL lexical items. Future research is necessary to explore further the use of smartphone video recording feature to engage participants from various faculties to produce theme-based content relevant audio-visual performances, and to evaluate the effect of theme-based learning on content specific academic word selection.
References


