CONTEMPORARY TUTORIAL CALL:  
USING PURPOSE-BUILT VIDEO AS A  
GRAMMAR TUTOR

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Despite an increased emphasis on form-focused instruction (FFI), the use of the computer as a grammar tutor has remained largely unexamined for nearly two decades. With new technologies at hand, there is a need to take a fresh look at online grammar tutors and link designs more strongly to contemporary second language acquisition (SLA) principles and the concept of a teaching presence. The aim of this study, therefore, is to investigate the potential of using a purpose-built digital video series as a virtual grammar tutor. To achieve this aim, we used a pre-test, post-test, and delayed post-test to evaluate the impact of a purpose-built grammar video on 62 EFL university students. The results of the study demonstrate that purpose-built video has strong potential for use as a virtual grammar tutor. Consequently, it may be possible to improve the state of Tutorial CALL from a drill-based approach to one that is more substantive through the development of a series of step-based video tutorials that tutor, allow for the practice of and evaluate second language (L2) grammar skills. **KEY WORDS:** Tutorial CALL, drill-based tutorials, step-based tutorials, grammar, form-focused instruction

INTRODUCTION

Until the mid-1980s, Tutorial CALL, or the use of technology to improve language proficiency (Hubbard & Siskin, 2004), focused primarily on grammar drills based on a focus on forms (FonFs) approach to teaching (Warschauer, Reinders, & Thomas, 2012). Students at the time were directed to use the computer to complete fill-in-the-gap tasks of a particular verb conjugation; in response, the computer would generate immediate “right/wrong” corrective feedback based on stored item-specific information. The computer offered no tuition of the assigned grammatical concept. Instead, the role of computer-based Tutorial CALL was to provide rote grammar practice to complement face-to-face (FtF) teaching. Although the name would suggest that the computer-based tasks were a true “tutorial”, it was teachers who actually provided the grammar tuition. During the era of FonFs, the method would have teachers explain discrete, de-contextualised grammatical items to which the computer would provide further practice.
Despite a rise in the mid-1990s of authorable software, developers have made little effort to create innovative exercises that highlight a focus on form (see Blake, 2011, for an overview); to date, it would appear that the potential of Tutorial CALL to strongly enhance success in language learning remains neglected (Garrett, 2009; Skehan, 2003). Specifically, the possible use of modern programming techniques, an inclusion of new media such as video clips and interactive items into online designs, as well as grounding work in the principles of computer-assisted SLA (Chapelle, 2001) suggest the need to revisit Tutorial CALL as a basis for modern language instruction. Indeed, there appears to be no reason why a focus on the structural system of language cannot be effectively incorporated into language-learning technologies including video clips (Doughty & Long, 2003).

The aim of this study, therefore, is to examine the use of Tutorial CALL to improve grammatical competence. To achieve this aim, we undertook a quasi-experimental study that measured the results of one 12-minute purpose-built Tutorial CALL video on the grammatical competence of 62 South Korean university students. In our design, we assessed grammar by looking at the English simple past tense verb with an understanding that competence referred to acceptable, rule-based understanding. Over the course of sixteen weeks, three tests were conducted: an initial pre-test in week one, an immediate post-test in week three, and a delayed post-test in week sixteen. Results of the study point to areas of significant difference that we discuss, and we suggest areas of further research.

**TUTORIAL CALL FOR GRAMMAR INSTRUCTION**

For nearly two decades, Tutorial CALL has been neglected as a viable approach to instruction largely because of the dominant use of communicative approaches in second language teaching (Chapelle, 2009). In a communicative language-teaching paradigm, Chapelle argues, the role of the computer is to provide comprehensible input; in this way, technological environments are designed in ways that allow students to acquire, rather than explicitly learn, the target language. As a result, the rote practice of grammar forms that forms the basis of Tutorial CALL has been set aside for a number of years.

Given the prominence of communicative activities, tool technologies that allow students to carry out particular language learning activities in semi-authentic socio-collaborative environments flourished, rather than designs that sought a view that learners could be taught by the computer. In spite of this, in a large study of students of French in Canadian universities, Peters, Weinberg, and Sarma (2009) noted that students prefer grammar and drill exercises offered by the computer – as a virtual tutor – as opposed to using the computer to interact in a series of communicative activities.

Despite the potential of Tutorial CALL, and apparent student preference for it, there are lingering misconceptions about its capacity to provide effective L2 instruction that have
fuelled a reluctance of teachers, researchers and developers to bring Tutorial CALL in line with modern learning theories and technologies. Hubbard and Sisken (2004), for example, argue that teachers and researchers alike have come to believe that Tutorial CALL is a *behaviourist* anachronism, and is thus inconsistent with modern learning theories. Hubbard and Sisken urge developers and researchers alike to reassess Tutorial CALL as an ‘eminently justifiable’ pursuit, and single out grammar tuition as especially suited for Tutorial CALL. For them, Tutorial CALL can be transformed from a set of dated automated grammar-drills to a complete and innovative series of step-based tutorials.

The idea of a Tutorial CALL program for grammar learning that virtually tutors a grammatical concept before giving the students a chance to practice it can be referred to as *step-based tuition* as in the area of computer-assisted learning (CAL) (VanLehn, 2011). Unlike drill-based tutorial programs that merely allow students to practice a grammatical concept, step-based tutorial programs provide pre-teaching and other scaffolding. In a meta-analysis, VanLehn (2011) provided evidence to show that step-based tutorials are more than twice as effective as drill-based tutorials and can compete with expert human tutors in terms of effectiveness ($d = .76$ versus $.79$).

In CALL, drill-based tutorials dominate the technology. *Hot Potatoes*, for example, is a drill-based tutor (Figure 1) that is often cited in the literature as an exemplar of Tutorial CALL (Blake, 2013).

One overlooked aspect of drill-based grammar tutors that utilise text as the tutoring component, such as Hot Potatoes, is the limited extent to which text *teaches* or *tutors*, especially when the text is read in a non-native language (Lotherington, 2007). Text-based grammar tutors assume the learner, it would appear, to be an autodidact who can tutor herself by reading the explanation, understanding it, and then applying it with no need for assistance. In such cases, we would argue that there is little difference between text-based tutorial programs and traditional grammar textbooks aside from the computer medium on which it is
displayed. Indeed, as Lankshear and Knobel (2006) have asked, why develop materials for an interactive medium if such a key potentiality of the medium is minimised? A video-taught grammar lesson, on the other hand, means that the content is taught to the learner, rather than the learner teaching herself through metacognition. As we will see, purpose-built video has much potential for explaining grammatical concepts.

**PURPOSE BUILT VIDEO**

Early efforts to define Tutorial CALL were unclear. Levy (1997), for example, had originally defined it as a form of evaluative software because it provided ‘feedback’; but such a view fell short of capturing the tutoring aspect of the technology. Could a spell checker that underlines a misspelled word, for example, be regarded as tutorial? Hubbard and Siskin (2004) offered a fresh perspective as they realised that a clear definition of Tutorial CALL needed to incorporate an understanding of teaching presence, or an extension through time and space, of its designer. According to the researchers, Tutorial CALL should be defined as having a ‘teaching presence’, which would allow for the development of software that more closely resembles FtF teaching and, accordingly, better align it with a core definition of the word ‘tutor’ as ‘a private teacher, typically one who teaches a single student or a very small group’ (Oxford English Dictionary, n.d.). Against such an understanding, Tutorial CALL must therefore, in some way, embody the teaching or tutoring traits that are similar to real life teachers and FtF learning. If seen from this view, drill-based tutorial programs and tool type technologies that lack a teaching presence cannot be truly considered as Tutorial CALL programs.

Neither the idea of using purpose-built video to teach grammar nor the idea of the importance of a technological teaching presence is new. Two decades ago, Rühlmann (1995), for example, asked why recorded video lectures of competent teachers explaining grammatical concepts had not yet replaced the lecture aspect of language classes. She argued that recorded language lectures would not only be more cost-effective, self-paced, and flexible but they would also standardise teaching. She also argued that video could capture both the factual information of what needed to be taught as well as the personality and enthusiasm of the teacher – or a presence. Her reasoning was straightforward: why not capture teaching in technology instead of emulating teaching through technology?

In CAL, purpose-built video is now common in instructional design (Allen & Seaman, 2013). Research shows that video-based learning may well supersede traditional FtF teaching in terms of effectiveness, and that recorded video lectures (or purpose-built video) in combination with FtF classes leads to increased student learning performance compared to conventional FtF classes (Kay, 2012). Purpose-built video also provides increased learning options in terms of choice, pace, and the time and location in which learning takes place, which means that purpose-built video improves students’ study habits by increasing time spent on task (Allen & Seaman, 2013). By contrast, some popular commercially available
Tutorial CALL self-study programs that utilise text-based grammar explanations show severe student attrition rates (Nieelson, 2011).

Despite what seems like an obvious instructional design choice for the development of contemporary Tutorial CALL due to its realism, its controllability, and its extra functionality, surprisingly, no research has been carried out on the effects of purpose-built video on second language learning. In an overview of video use in CALL over the past ten years, Vanderplank (2010) examined DVD, streaming video, video-on-demand, interactive television and digital language laboratories; perhaps mistakenly, however, the overview did not mention purpose-built video. In similar overviews, Blake (2009, 2011) did not mention the use of purpose-built video.

By contrast, research into the use of authentic DVD and digital video clips is well established (Vanderplank, 2010). While some researchers (e.g. Tschirner, 2001) have argued that authentic video provides rich enough input for the improvement of grammatical comprehension, because the input allows for syntactic linguistic processing, empirical research has shown that the use of authentic video is deficient and ineffective for grammar instruction. Van Lommel, Laenen, and d’Ydewalle (2006) found no significant connection between school-aged children who watched authentic video in the target language and their grammar acquisition. This is unsurprising considering that attention to form has been found to be central for grammar acquisition (Sharwood Smith, 1993; Skehan, 2003) and authentic video does not provide this. In other words, authentic video lacks that which purpose-built video possesses: the incorporation of SLA principles into its design.

THE USE OF PURPOSE-BUILT VIDEO TO TRANSFORM UNINSTRUCTED INPUT INTO FFI

Technologies can be chosen for their language-learning potential or technologies can be built according to SLA pedagogy (Stockwell, 2007). Researchers and developers in CALL have long sought to bind pedagogy more closely with technology, and have thus urged developers to build technology according to pedagogical principles (Chapelle, 2007; Felix, 2008; Skehan, 2003). Lamenting the ineffectiveness of CALL two decades ago, which is still an issue today, Laurillard (1993) presciently argued that, ‘If the use of new technology were to begin with an analysis of what students need, instead of an analysis of what the technology can offer, we should make far better use of it.’ (p. 1). Clearly it is simpler to choose an existing technology and use it in the language classroom rather than develop purpose-built technologies based on SLA principles (see Otto and Pusack, 2009, for an overview of the difficulty involved in developing purpose-built software).
However, purpose-built technology is the only technology that can provide the answer to both Skehan’s (2003) and Garrett’s (2009) vision for Tutorial CALL programs that can transform uninstructed input into FFI.

Skehan (2003), for example, argues that because there is an enormous amount of English language exposure already available to both ESL and EFL learners, especially on the Internet, students need CALL tutorials that can restructure this input into FFI. Comprehensible input and interactive possibilities that students can access through tool technologies, he argues, are not enough to develop target language accuracy, fluency, and complexity. Skehan envisages software materials that allow learners to engage with their interlanguage system by noticing certain features of the target-language that in turn allow them to develop it. To progress in this area, Skehan suggests, the development of audio-visual materials may well have particular potential.

Garrett’s (2009) vision for the future of grammar-based Tutorial CALL is similar. She sees a database of computer-animated grammar explanations combined with meaningful examples. But why use animated computer-graphics when purpose-built video most closely resembles FtF learning? Fortunately, purpose-built video is one type of technology that is relatively easy to develop according to pedagogical principles and is comparatively less expensive to produce than other media and technologies.

RESEARCH QUESTIONS

Given the gaps in current theory, we posed two research questions to investigate the impact of the use of purpose-built grammar video on the development of grammatical competence:

1. What is the effect of the purpose-built grammar video on learner grammatical competence as measured by an immediate post-test?
2. What is the effect of learning attrition on learner grammatical competence as measured by a delayed post-test?

METHOD AND INSTRUMENTS

One purpose-built grammar video acted as the treatment after the pre-test and before the post-test and delayed post-test. The 12-minute video consists of Merlo (the primary researcher of this study) methodically teaching the English simple past verb tense. The video features a rear-projected PowerPoint presentation to help explain the grammatical concept at hand in terms of structure, meaning, and forms (positive, negative, and question). The lesson consists of three key steps: introduce the concept, teach the concept, and recapitulate the concept. Throughout, Merlo offers concise definitions and simple examples, while font colour and font size are used to help enhance attention to the material.
The simple past tense verb was chosen as a result of a pilot-test conducted on a participant sample that included many of the students who participated in the study. The pilot-test was a general English test that included various grammatical items, including identifying parts of speech, three verb types (past simple, present perfect, be + going to), prepositions and comparative adjectives. The results of the pilot-test indicated that the simple past tense verb would be a relevant item to examine, as there were numerous errors in participants’ understanding. Moreover, the English language instructors concurred that the simple past tense verb would be sufficiently challenging for their students based on their classroom experience. Finally, in this study’s survey the participants rated their grammar skills as 2.57/5, which is moderate. To this end, the simple past verb tense is moderately complex given the mixture of regular (+ed) and irregular positive forms and the somewhat complicated structure of negative and question forms.

Given the above information, the choice of the English past tense verb tense taught by the purpose-built video was considered applicable for this particular group of participants in this particular learning environment where they were not given explicit instruction on English grammar.

**PRE-TEST, POST-TEST, AND DELAYED POST-TEST**

Each of the three tests included ten questions that focused on three main areas:
1. Structure  
a. verb+ed  
b. irregular  

2. Meaning  
a. Finished actions  
b. Finished thoughts  
c. Finished feelings  

3. Forms  
a. Positive  
b. Negative  
c. Question  

In order to ensure equivalency between the three tests (counterbalancing was not possible due to the electronic nature of the tests) seven strategies were employed to reduce the possibility of priming and question bias.

First, no single verb was used more than once between tests, nor were any verbs used that were used in the narrative or examples of the video. In other words, all of the verbs used in the tests were different from one another to avoid memorisation of answers.

Second, the verbs chosen for the tests were selected from a corpus list of the 500 most frequently used verbs from *The Corpus of Contemporary American English* (Davies, n.d.). By doing this, the mean verb frequency between the three tests was kept as equivalent as possible so that the chances of participants receiving easier or harder (more frequent or less frequent) verbs between tests was significantly reduced.

In order to verify this, a one-way between subjects ANOVA was conducted to compare word frequencies between the three tests. Descriptive statistics showed that the mean word frequencies were not significantly different from one another. In fact, the mean word frequencies between tests were held almost constant at 245.5, 248.3, and 263.7 respectively. Post-hoc testing revealed no significant differences between the three tests; in other words, in terms of frequency, the verbs used in the pre- and two post-tests were nearly identical to each other, and if anything, the two post-tests were slightly more difficult than the pre-test.

Third, as well as frequency, verb morphology was also accounted for. For example, if an irregular past verb was used in the pre-test question, such as *knew* (frequency rating = 47) then the closest past verb in terms of frequency and morphology was used in the corresponding post-test and delayed post-test questions – in this case, *gave* (98) and *saw* (67). Fourth, phrasal verbs were carefully matched between tests (*stood up/sat down*). The
fifth strategy was that the syntax of each multiple-choice answer maintained a strict and simple structure between pre and post-tests.

In the sixth strategy, of the five answer options, which included one main distracter and three possible answers, there was also an option of “I don’t know”. It was hypothesised that being able to opt-out of answering would increase reliability of the overall test design by eliminating the chances of lucky guesswork. Post-test analyses revealed that “I don’t know” was infrequently and randomly chosen among participants which supported the hypothesis. Lastly, a program function randomised the multiple-choice answers among tests; so while the question order remained constant for each participant the position of his or her multiple-choice answers did not (apart from “I don’t know”). This randomising function reduced answer order-bias within the test and the possibility of participants cheating by collusion.

SITE OF THE STUDY AND PARTICIPANTS

The testing took place at two universities in South Korea in conversational English classes. All tests and the grammar video treatment were delivered through an online survey website and administered in class under close supervision by non-Korean English language instructors.

A select sample of 62 participants from several conversational English language classes took part in the research. A preliminary questionnaire revealed that of these 62 participants:

1. Their study majors were mixed, and some included EFL.
2. Both males and females participated.
3. All but nine participants identified as South Korean nationals – the other nine were of Chinese origin.
4. They rated their own English skills from “very bad” to “very good” on a 5-point Likert scale as:

<table>
<thead>
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<th>Skill</th>
<th>Average</th>
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<tbody>
<tr>
<td>Reading</td>
<td>3.09</td>
</tr>
<tr>
<td>Writing</td>
<td>2.71</td>
</tr>
<tr>
<td>Listening</td>
<td>2.96</td>
</tr>
<tr>
<td>Speaking</td>
<td>2.54</td>
</tr>
<tr>
<td>Grammar</td>
<td>2.57</td>
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</tbody>
</table>

Most had studied EFL for between 8 and 12 years.

DATA COLLECTION PROCEDURES

The testing took place over sixteen weeks. The sequence was as follows:
• Week 1: Pre-test
• Week 3: Purpose-built video treatment + immediate post-test
• Week 16: Delayed post-test

While the participants accessed and completed all the tests on their individual cell-phones, the participants viewed the purpose-built grammar video treatment collectively on a shared screen as a class so that the proctors could be sure that all students were paying attention. Indeed, the proctors reported the participants to be ‘actively attentive’ during the testing period to both the individual cell-phones during the testing and the shared classroom screen during the treatment video viewing.

RESULTS

Test data were collected by the survey hosting website which was then analysed using the software application for statistical analysis, SPSS 21 (IBM, 2012).

A paired samples t-test was conducted to measure the effects of the tutorial video by comparing all 62 participants’ pre-test scores and post-test scores (see Table 1). The analysis showed that there was a significant difference between their pre-test scores (M = 5.82, SD = 2.615) and post-test scores (M = 7.31, SD = 2.207); t(61) = -5.15, p < .001.

Put simply, after watching the tutorial video participants immediately improved their post-test score performance by an average of 14.9%. The lowered standard deviation also meant that test-score consistency improved among the group, too.

| Table 1. Descriptive statistics of participants’ pre- and post-test scores |
|---|---|---|
|               | N | Mean  | Std. Deviation |
| Pre-test score| 62| 5.82  | 2.615          |
| Post-test score| 62| 7.31  | 2.207          |

To test the equality of the means from work that was gathered under different conditions, a repeated measures ANOVA (see Cunnings, 2012) was conducted to compare the test scores of a subset of 27 participants who also completed a delayed post-test thirteen weeks after the post-test (see Table 2). The video treatment had a significant effect on participant test scores, Wilks’ Lambda = 0.59, F (2,25) = 8.615, p = .001. Three paired samples t-tests were used to make post hoc comparisons between the test scores. A first paired samples t-test indicated that there was a significant difference between the pre-test scores (M = 5.48, SD = 2.532) and post-test scores (M = 7.11, SD = 2.225); t (26) = -3.309, p = .003. A second paired samples t-test indicated that there was a significant difference between the pre-test scores (M = 5.48,
SD = 2.532) and delayed post-test scores (M = 7.44, SD = 2.486); t (26) = -4.233, p < .001. A third paired samples t-test indicated, however, that there was no significant difference between the post-test scores (M = 7.11, SD = 2.225) and delayed post-test scores (M = 7.44, SD = 2.486); t (26) = -1.041, p = .308.

Table 2. Descriptive statistics of 27 participants’ pre-, post-, and delayed post-test scores

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test score</td>
<td>27</td>
<td>5.48</td>
<td>2.532</td>
</tr>
<tr>
<td>Post-test score</td>
<td>27</td>
<td>7.11</td>
<td>2.225</td>
</tr>
<tr>
<td>Delayed post-test score</td>
<td>27</td>
<td>7.44</td>
<td>2.486</td>
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In other words, similar to the results of the entire group (n = 62), the post-test results of the participant subset (n = 27) also showed an immediate improvement in grammatical competence, this time by an average of 16.3%. The results of the delayed post-test, in addition, revealed that participant test performance increased slightly by 3.3% suggesting that learning improvements compounded over time (see Figure 3).
Importantly, none of the participants received any in-class instruction on the past tense verb at any time during the entire testing period. In fact, because the English classes were focused on the development of conversation, the participants were not exposed to FFI in any way. Whether or not the students were exposed to the verb in question outside of the testing conditions is unknown.

**DISCUSSION**

In the review of related literature, we identified several issues related to the precedence of communicative language teaching paradigms and the subsequent favouring of socio-collaborative tools for CALL. Because of this, the development of Tutorial CALL in service of grammar teaching remained stagnant for two decades. Outside of CALL, we found research that shows that step-based tutorials are more than twice as effective as drill-based ones; unfortunately, Tutorial CALL has not kept pace with such evident progression towards substantive step-based tutorials. As a result, researcher, teacher, and developer attitudes towards Tutorial CALL are not favourable.

Such attitudes, however, are misconceived. Purpose-built video has a palpable teaching presence (Hubbard & Siskin, 2004) and can be constructed based on salient SLA principles to tighten the connection between theory and its application to technologies (Felix, 2006). Purpose-built video, we argue, addresses the challenge of bringing Tutorial CALL out of an evaluative mode in ways that Garrett (2009) and Skehan (2003) have sought. In short, the use of video-based tutorials to effectively explain a grammatical concept can lead to improved learner grammatical competence.

**IMPLICATIONS**

This study indicates that, as Hubbard and Siskin (2004) urged, Tutorial CALL may be a valuable addition to tool type software and the vast amounts of media input available to learners on the Internet. Technology could provide FFI to make the abundance of authentic materials available, especially on the Internet, more structurally focused (Skehan, 2003). Specifically, purpose-built video could be the explanatory aspect of the FFI used in conjunction with meaningful examples taken from the Internet. As Garrett (2009) envisioned, purpose-built video could be linked in a network of subsystems to various input making it more accessible, functional and meaningful.

**LIMITATIONS OF THE STUDY**

That there was no control group used in this study is a serious limitation. While the study shows that students learn, the absence of a control group means the causal relationship is
As well as a control group, a larger and more complex sample, including speakers of languages other than Korean, would yield more generalisable results.

In terms of a more valid research design, Felix (2008) recommends using two randomly selected groups with one receiving the treatment for the first part of the testing period and then the groups switching, also known as a time-series design. Indeed, a longitudinal time-series design using multiple purpose-built grammar videos, including more difficult grammatical items such as the semantic distinction between past tense verbs and present perfect verbs, would more fully verify the efficacy of the medium. In addition, more substantial testing before, between, and after the video treatment would give clearer insights into the true effectiveness of the medium.

Another limitation of the study was that it did not test for grammatical production, and instead only measured grammatical competence. A future study might also find ways to measure the effects of the purpose-built video medium on grammatical production by way of writing or speaking. Finally, a future study might also examine the learning processes of the participants, rather than focusing solely on the learning outcomes (see Purpura, 2004, for advanced techniques on grammar assessment).

From a practical standpoint, the time and money spent developing the video under review was considerable, which would limit many teachers from developing such materials for the classroom. Indeed, ‘off the shelf’ tool type technologies are favourable to teachers because they require no time or resources to develop (Otto & Pusack, 2009).

**AGENDA FOR FURTHER RESEARCH**

Although technology should be built according to sound language teaching principles, technology can actually offer new ways to improve upon these principles. For example, purpose-built video has much potential because of its additional functionality. Streaming video, for example, cannot be separated from its media player. The player offers pause, rewind, replay as well as reduced speed functions. Similarly, the generated user interface, or GUI, in which the video player is embedded, offers further pedagogical potential in terms of embedded exercises and follow-up tests. An empirical evaluation of the effects of the purpose-built video, its pause, rewind, replay decreased speed functions, and also its GUI, is an extremely promising field of research.

Although this research focused on only one grammatical item – the simple past tense verb – the website from which it was taken, www.e2language.com, has, to date, produced 208 purpose-built grammar videos spanning a majority of the English grammar system. A longitudinal assessment of the effects of this digital video syllabus on student grammar performance would be an important area of future research in Tutorial CALL.
CONCLUSION

This research sought to elevate the current position of Tutorial CALL out of simple evaluative drill-based software into what many researchers (Garrett, 1991, 2009; Hubbard & Siskin, 2004; Skehan, 2003) have theoretically described for nearly two decades but no one has, to date, tangibly produced, namely a Tutorial CALL program that introduces, fully explains, and allows students to practice a particular structure – what we referred to as step-based tuition based on VanLehn’s (2011) studies in CAL. By using Hubbard and Siskin’s (2004) definition of Tutorial CALL that has a teaching presence, purpose-built video was singled out as a learning technology that fulfils this definition best as it captures rather than emulates the teaching process, and what can be captured can be high quality language instruction with a clear and distinguishable teaching presence. The scope was limited to a single purpose-built video treatment taught by one of the present researchers on the past tense verb, and this video was investigated as to its impact on 62 participants’ grammar competence as evidenced by their pre- and post-test scores and 27 of those participants who also completed a delayed post-test. The research showed significant learning improvements as a result of the video treatment, and lasting effects. In brief, the immediate post-test results showed a 14.9% (n = 62) improvement rate while the delayed post-test of 13 weeks showed a further 3.3% increase (n = 27) leading to the conclusion that the purpose-built grammar video successfully tutors second language grammar competence and its effects are long-lasting and building. Overall, its potential as a virtual grammar tutor in the role of a step-based tutor is very promising.

REFERENCES


**ENDNOTES**

i  See [www.e2language.com](http://www.e2language.com)

ii  American English was chosen because it is the most commonly taught English in South Korea, as opposed to British English.

iii  [www.surveymonkey.com](http://www.surveymonkey.com)

iv  More recent studies utilising a control group have been conducted to test the learning effects of purpose-built grammar videos on student learner performance. These more recent studies have shown that the treatment group does outperform the control group. This research, however, is yet to be published. Should the reader want to know more he/she may contact the primary researcher for more information (Merlo).