The Use of Dictogloss as an Information Gap Task in Exploiting Dual Application Principle in Learning Irregular Verbs

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Abstract
Irregular verbs are one of the most challenging grammatical structures for ESL students to learn. The Dual-Mechanism Model states that there are two mechanisms of how regular and irregular verbs are processed, regular verbs are processed through rule application mechanism whereas irregular verbs are retained and retrieved from associative memory. This sometimes results in the heavy use of rote-learning and raw memorization of irregular verbs in order for ESL learners to acquire these grammatical structures. However, it is implied that dictogloss, an information gap task, may assist learners to learn irregular verbs without strong emphasis on drilling and memorizing. 34 students of a vocational college in Malaysia were selected and assigned into an experimental group and a control group. The experimental group was given three types of dictogloss tasks involving three different cognitive processes of matching, ordering and listing which required them to conjugate irregular verbs whereas conventional drilling exercising was given to the control group. Paired and unpaired samples t-tests indicate that dictogloss is effective in facilitating learners’ mastery of past tense forms of irregular verbs. The findings from the questionnaire also denote positive perceptions on the
tasks in assisting their learning of the target form. Hence, dictogloss can substitute drilling and memorizing exercise in learning irregular verbs.

**Keywords:** dual mechanism, irregular verbs, reconstruction, conjugation, dictogloss, information gap tasks
1. Dual-Mechanism Model in Learning Irregular Verbs

According to Pliatsikas and Marinis (2013), dual-system models suggest that English past tense morphology comprises two processes: rule application for regular verbs and memory retrieval for irregular verbs. English past tense forms can be divided into two types: regular past tense forms (regular verbs) where suffix “ed” is added at the end of the base form of a verb and irregular past tense forms (irregular verbs), where the verb has different structures as past tense or past participle forms (Pinker & Prince, 1988; Pinker & Ullman, 2002).

The dual-mechanism model (Pinker and Prince, 1988; Pinker, 1999; Ullman, et al, 1997; Baayen et al, 1997; Marslen-Wilson and Tyler, 2003, Clahsen, 1999, Ulman, 2001, Pinker and Ulman, 2002) distinguishes the difference between two distinct processing mechanism of regular and irregular forms in which regular forms are computed in real time by a distinct rule-processing system. This allows individuals to merely employ rules to indicate the different structures of regular verbs (e.g. bake & baked, shout & shouted, cry & cried) with the use of inflection “d”, “ed” and “ied” on the base form of a verb. Meanwhile, irregular forms are actually stored in a mental lexicon that bears associative properties which are similar but not fully identical and these irregular past tense forms are retrieved as already inflected forms from associative memory (e.g. blow & blew, sleep & slept, eat & ate, take & took, bear & bore). This means that individuals have to retain memories of the different structures of irregular verbs and how they can be associated to each other. As a result of the specific mechanism of memorizing irregular verbs as the only way to learn the structures, most teaching methods of irregular verbs are confined to memorization, drilling, rote-learning and repetition (Tesarova, 2009; Sinhaneti and Kyaw, 2012; Setianingsih, 2010; Abadia, 2012).

1.1 Morphology, Phonology and Frequency of Irregular Verbs

However, it is crucial to identify ways of teaching or learning irregular verbs without heavily dependent on rote-learning and memorization. Abadia (2012) proposes the application of the principles of frequency, phonological modularity and morphological similarity as a way of teaching irregular verbs other than raw memorization. He (2012) conducted a study on 17 adult learners and attempted to obtain their feedback on the application of the phonological and morphological similarities of the conjugation of irregular verbs and the findings indicate that the learners discovered that there is consistency in phonological pattern and morphological rules in conjugation of irregular verbs. Prasada and Pinker (1993) analyzed learners’ ability to produce past tense forms of irregular and regular verbs based on phonological and morphological similarities. The findings reveal that the learners produced equal number of past tense forms of regular verbs inflected with suffix “ed” whether the similarities between the forms are close or distant. However, the findings indicate that decreasing similarity between the past tense forms and present tense forms of irregular verbs affects learners’ tendency to incorrectly apply the rules of inflecting “ed” in past tense forms of irregular verbs. Kirkici (2005) studied the effects of frequency of irregular and regular verbs on 22 low proficiency L2 learners, 24 high proficiency L2 learners and 6 L1 learners in a higher learning institution in Turkey. A set of matching pairs of regular and irregular verbs
were selected based on their frequency. The learners were required to state the past tense forms of irregular or regular verbs shown to them and the duration that they took to respond correctly to each verb was taken. The findings show that L1 learners took almost the same duration to respond to every regular and irregular verb of both high and low frequency. High and low proficiency of L2 learners took longer time to react to regular verbs than irregular verbs. They also had longer duration of reaction on irregular verbs with low frequency than irregular verbs with high frequency. These studies suggest that learners are able to learn irregular verbs through the manipulation of phonological similarity, morphological similarity and frequency of the irregular verbs in grammar tasks.

2. Dictogloss Tasks in Teaching Grammar

There are many types of reconstruction tasks and dictogloss is the most prominent one. Dictogloss was developed by Wajnryb (1990), it consists of preparation, dictation, reconstruction and analysis and error checking. This text recreation task requires learners to retain fundamental points of a text and complete the text by utilizing their own linguistic and grammatical resources to create their own version of the text. Dictogloss is a task which integrates all the four language skills: listening, speaking, reading and writing. The participants have to listen and speak to their peers during the reconstruction. They also need to read the original text and write a reconstructed version of the text which includes writing individual notes (Jacobs & Small, 2003). Wajnryb (1990) argued that dictogloss is a type of information gap because it creates a genuine need for communication to gather and negotiate information among participants in order to bridge the information gap and complete the tasks. The final stage of the task is the most fundamental one as students discuss their interpretation of the reconstructed texts in order to produce text that is as close as possible in meaning, content and function to the original version.

There are other types of reconstruction tasks which can be merged with dictogloss. Rutheford (1987) proposed a reconstruction task called “propositional cluster” which require learners to collaborate in group and reconstruct a text from content words by inserting function words and other necessary features to create a complete text. Another type of reconstruction task is text repair (Eckerth, 2008). In this task, learners are given either a grammatically incorrect or incomplete text that they have to respond by making sure the text is grammatically accurate by correcting the errors or filling in the missing gaps. There are many benefits using reconstruction tasks for learners. First, experimenting and hypothesizing grammatical rules (Swain & Lapkin, 1995)). Second, noticing differences between their reconstructed text and the original text (Thornbury, 1997). The third benefit is realizing the inaccurate ways of how the target form is applied (Sharwood Smith, 1993). Next, developing abilities to make connections between words and meaning (Wajnrb, 1993). Lastly, it increases active involvement and interaction between students (Wajnrb, 1990). Swain and Lapkin (1995) state that the task which demands additional effort from the students will trigger learners’ awareness of their linguistic difficulties that allows them to notice the target form and possibly acquire it in a long run. The matching between the original text and the reconstructed version can lead to restructuring of their existing knowledge (Tomasello & Herron, 1988).
There were studies which suggest that text recreation can promote learners’ abilities to learn irregular verbs without drilling and raw memorization. Mattson (2010) conducted a study on ESL learners in an American public elementary school to examine the use of less explicit recast and more explicit metalinguistic cue in teaching them irregular verbs which required students to listen to a verbally presented text, complete grammar exercises and present their versions of the text visually and orally where irregular verbs were the focus of each activity. The findings imply that learners learn irregular verbs better from the less explicit recast. Odetallah (2013) suggests teaching past tense forms of irregular verbs that involve learners to recreate their own versions of a text by filling in the blanks in an incomplete text given to them. It is implied that learners can effectively learn past forms of irregular verbs if they are given the opportunity to collaboratively create their version of a particular text after they listening to it.

Several studies on dictogloss showed that the tasks could potentially be effective in promoting noticing of grammatical forms. Toshiyo (1996) did an analysis of Language-Related Episodes on four adult students who were assigned to perform dictogloss tasks revealed that most of their interaction was centered on grammar followed by meaning. The findings indicated that dictogloss tasks promoted discussion on meaning and form, that understanding of the original text was crucial for students to reconstruct the text and discuss on grammar, feedback and input for students were needed especially during the reconstruction stage. Lack of understanding of the original text, limited linguistic resources and absence of feedback could impair students’ ability to reconstruct the text and negotiate form and meaning. Lapkin and Swain (2000) compared the use of dictogloss and jigsaw, two prominent types of information gap tasks, on four classes of students to study the effects of these tasks on their use of pronominal verbs in writing narrative essays. The findings revealed that students who performed dictogloss produce more correct pronominal verbs, create more contexts for pronominal verb use, and produce a higher ratio of correct pronominal forms to overall pronominal forms and obligatory contexts than the students who did jigsaw tasks. A study was conducted by Harwood (2008) on the use of dictogloss task (dictation, reconstruction and error analysis) that involved a number of Singaporean students in order to identify their use of generic singular, lexical chains, modal, and gerund. The findings from retrospective questionnaire administered indicate that the students found the tasks useful, enjoyable and achievable. Storch (1998) implemented a study involving 30 ESL tertiary learners of intermediate and advanced level of English proficiency on the use of propositional cluster task to investigate their ability in using functional words (e.g. articles and prepositions) and inflectional morphemes (e.g. singular/plural markers and tense markers). The findings reveal that the learners struggled most with past tense markers (e.g. suffix “ed”), advanced learners approached the task through whole-sentence basis whereas intermediate learners went through word-by-word basis, learners applied referencing skills in order to decide on which grammatical features they should use, and the text can be modified to cater to the different proficiency of the students. Hence, it can be deduced that dictogloss pushes learners to be more analytical in recreating a text with accurate application of grammatical structures and past tense related-grammatical rules are the most challenging one for them to address.
Mcnicoll and Lee (2011) studied learners of English from a South Korean university on their knowledge of several English grammatical structures through two types of reconstruction tasks: dictogloss and text repair task which focused on past tense/interrogative, present perfect/simple past, modals and past perfect. They were assigned into 3 groups of beginning proficiency, intermediate proficiency and a group of combined proficiency of beginning and intermediate. Pre-test, post-test and delayed test were administered and the results denote learners’ improvement from text repair tasks but not from dictogloss. This is attributed to the nature of text repair that are less difficult than dictogloss. In text repair task, learners are provided with a written format of the text instead of being read aloud. This enables learners to focus more on grammatical features of the text without being influenced by the challenges of attentively listening to a text. Dictogloss, on the other hand, is more cognitively demanding as learners have to listen to the texts being read aloud to them for a limited amount of time. This causes them to be more focused on trying to remember the details than paying attention to the grammatical features as they are distracted with lexical and listening aspects of the tasks. It can be inferred from the findings that dictogloss is best conducted by presenting the original text in a written format than a spoken one and the tasks are effective in assisting learners to understand past tense-related grammatical structures. Based on these studies, some features of dictogloss which specifically focus on developing learners’ master of past tense forms of irregular verbs were isolated and applied:

1. Original texts are presented as written input (Eckerth, 2008; Mcnicoll & Lee, 2011; Thornbury, 1997).

2. Only the important points from the original text are retained and highlighted in the recreated text: (Wajnryb, 1990; Harwood, 2008; Mattson, 2010).

3. Errors identification and correction are expected to be performed in which the reconstructed text is compared with the original text (Wajnryb, 1990; Harwood, 2008).

4. Various text manipulation techniques can be incorporated into the dictogloss (Eckerth, 2008; Mattson, 2010; Odetallah, 2013).

5. Irregular verbs should be chosen based on phonological similarity, morphological similarity and frequency (Abadia, 2012; Kang, 2010; Julius et al., 2008; Kirkici, 2005; Prasada and Pinker, 1993).

6. Conversion of one form of irregular verbs to another form (abadia 2012).

Based on list of irregular verbs provided by Justus et al. (2008) and Kang (2010), a list of irregular verbs with the most phonological and morphological similarities as well as highest frequency of being used is drawn and used in the study.
Table 1. List of irregular verbs of morphologically and phonologically similar of the highest frequency

<table>
<thead>
<tr>
<th>Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Put, let, set, cut, hit, spread, fit, shut, hurt, cost, cast, burst, split, bet, thrust, shed, quit, knit, bid, wet, slit, rid, wed, beat, spit, knew, gave, lay, saw, came, found, tore, took, froze, drove, rode, rose, sat, ran, sang, flung, stung, spun, strung, snuck, was, misled, beheld, forgot, withstood, Send, Build, lend, have, think, bring, catch, fight, keep, leap, weep, say, feel, hear, lose, meet, feed, hide, light, slide, flee, kneel, grow, fly, blow, stand, hold, bind, wind (v.), swear, tread, shake, wake, steal, weave, stride, strive, drink, strike, clung, built, drank, stole, wove, lent, swung, forgave, awoke, began, mistook, held, slunk, kept, thought, lost, went, swore, had, leapt, struck, woke, lit, stood, flew, swam, strove, said, wound, hid, strode, slung, caught, shook, heard, fed, fled, wept, slid, sent, trod, blew, brought, bound, fought, grew, shrank, met, felt, knelt, hung, rang, sank, won, sprang, wrung, stank, arose, became, withdrew, upset, spent, bent, dwelt, made, bought, taugh, sought, slept, swept, crept, did, told, left, read (past), led, sold, dealt, shot, dreamt, bit, bled, sped, drew, threw, ate, chose, fell, ground, bore, wore, got, broke, spoke, wrote, dove, shone, smote, tug, stuck, swing, swim, cling, shrink, sling, slink, go, mistake, begin, forgive, awake</td>
</tr>
</tbody>
</table>

2.1 Dictogloss Task

There were three different dictogloss tasks used in this study involving three different types of cognitive process and three different texts respectively. The three cognitive processes were matching, ordering and listing (Willis & Willis, 2007).

(a) Matching: each pair was given two versions of a text entitled “Elephant Track” containing weekly routine of an elephant from various aspects of its life. The elephant’s habits were categorized based on routines instead of days: drink, foot, sleep, play, and travel but the information in the text was not properly sorted and presented. Each learner was required to match the information in their text with the correct categories of what type of information was provided: drink, foot, sleep, play and travel. They were told to report the elephant’s routine as if it something that has happened in the past with specific categorization of information. Since the two versions of the text contained two portions of separated information, the learners had to complete these two activities individually. At this stage, they were required to use the past tense form of irregular verbs. In the following activity, the learners were then required to exchange information and reconstruct the text based on the different information they had. They could identify the missing information that each of them was able to find in their versions of the text.

(b) Ordering: each pair received two versions of the text entitled “Giraffe Dash” which was about a series of events and activities of a particular giraffe. The text was presented in a set of sentences which were not arranged in an appropriate order. Thus, each learner was expected to report their own versions of the text by arranging the sentences in a correct order based on its possible logical connections. They were also
required to convert every verb into its past tense forms which required them to also convert the irregular verbs from their simple present tense forms into past tense forms. The two versions of text contained two different series of events that they had to individually rearrange in a correct sequence. After reconstructing the text individually with their own choice of sentence order and use of irregular verbs, each pair was instructed to reconstruct the text by sharing the information they had and rearranged them in a correct order that both agreed.

(c) Listing: the pairs received two different versions of a text entitled “Croc Catch” which was a description about crocodiles. Each version contained only a half of the information. Each learner was asked to list the important points from each of their text where they also had to convert the simple present tense forms of irregular verbs into past tense forms. Then, they were asked to collaboratively discuss the information they each had and combine the different pieces of the information in order to write a summary of the text by highlighting the important details of the description. The summary was their version of the reconstructed text.

3. Research Question

1. Is dictogloss effective in promoting learners’ mastery of irregular verbs?
2. What are the features of dictogloss that assist learners’ mastery of irregular verbs?

4. Methodology

4.1 Sample

The subjects were selected through random cluster sampling (Fraenkel, Wallen & Hyun, 2012) as their selection was narrowed from a cluster of vocational colleges across Sabah. There were 34 participants involved in the study and they were 17 year old sophomore students of two vocational courses: Industrial machinery and electronic technology from Keningau Vocational College. Their English proficiency was considered as lower intermediate due to their achievement in the standardized national exams for lower secondary schools where most of them obtained grades E, D and C which suggest insufficient mastery of English language.

4.2 Instrument

There two instruments used to collect data in this study were pretest/posttest and questionnaire. The pre-test and post-test contained 12 questions of multiple choice and 16 questions of fill-in-the-blanks adapted from Mattson (2010). The questionnaire was a 5 point Likert-scale rating number from 1 (strongly disagree) to 5 (strongly agree) containing 8 items which were designed to obtain students’ perceptions of the tasks.

4.3 Procedure

The data collection took five weeks to be completed. Pre-test and post-test were administered during the first and the final week respectively for 15 minutes. The treatment which consisted of the three tasks was conducted in three weeks with 30 minutes allocated for each task. Questionnaire was administered on the fifth week where the learners had 10
minutes to complete it. Prior to the administration of each of the tasks, the learners were presented with a list of conjugated structures of irregular verbs where the teacher briefed them about the unique grammatical rules on irregular verbs. The dictogloss consisted of text comprehension, text reconstruction and text comparison.

4.4 Data Analysis

Paired-samples t-test was used to analyze means of the pre-test and post-test scores of each of the group and unpaired samples t-test was used to compare the gain scores of the two groups (Seliger & Shohamy, 2008). The data from the 5 point Likert-scale questionnaire were analyzed by obtaining the means and standard deviations of responses for each item in the questionnaire were which were matched with the level of agreement proposed by Atef and Munir (2009) and Shams (2008): 1.00-1.49 (strongly disagree), 1.50-2.49 (disagree), 2.50-3.49 (neutral), 3.50-4.49 (agree) and 4.50 – 5.00 (strongly agree).

4.5 Results and Discussions

Table 2. Paired samples t-test

<table>
<thead>
<tr>
<th>Group</th>
<th>Paired differences</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. error mean</td>
<td>95% confidence interval of difference</td>
</tr>
<tr>
<td>Control</td>
<td>0.81</td>
<td>0.60</td>
<td>0.144</td>
<td>-0.97 0.37</td>
</tr>
<tr>
<td>Experimental</td>
<td>6.67</td>
<td>1.71</td>
<td>0.374</td>
<td>-7.45 5.89</td>
</tr>
</tbody>
</table>

The p values for each group is smaller than 0.05. Hence, there is a significant difference in means of scores between the groups’ performance on the pre-test and the post-test:

Table 3. Independent samples t-test

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>0.81</td>
<td>0.60</td>
<td>14.7860</td>
<td>40</td>
<td>0.0001</td>
</tr>
<tr>
<td>Experimental</td>
<td>6.67</td>
<td>1.71</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The P value is less than 0.05, p= 0.0001. This denotes that the difference in means of gain scores between Control Group and Experimental Group is considered to be statistically significant.
Table 4. Learners’ perception on dictogloss

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Did the task help you to learn irregular verbs?</td>
<td>3.85714</td>
<td>0.72703</td>
</tr>
<tr>
<td>2</td>
<td>Did the task help you to pay more attention on irregular verbs?</td>
<td>4.14286</td>
<td>0.57321</td>
</tr>
<tr>
<td>3</td>
<td>Did the technique of changing the simple present forms of the verbs into past tense forms help you to remember the past tense forms of the irregular verbs?</td>
<td>4.38095</td>
<td>0.74001</td>
</tr>
<tr>
<td>4</td>
<td>Did the technique of writing a new text based on the original one help you to pay more attention to the past tense forms of the irregular verbs?</td>
<td>4.2381</td>
<td>0.88909</td>
</tr>
<tr>
<td>5</td>
<td>Did the technique of identifying the errors in your version of the text help you to pay more attention to the past tense forms of the irregular verbs?</td>
<td>4.14286</td>
<td>0.47809</td>
</tr>
<tr>
<td>6</td>
<td>Did the task in general help you to remember the past tense forms of irregular verbs?</td>
<td>3.66667</td>
<td>0.65828</td>
</tr>
<tr>
<td>7</td>
<td>Did the task help you to be aware of what you did not know about irregular verbs before?</td>
<td>4.52381</td>
<td>0.51177</td>
</tr>
<tr>
<td>8</td>
<td>Do you think this task is more effective than other tasks in learning irregular verbs?</td>
<td>3.7619</td>
<td>1.09109</td>
</tr>
</tbody>
</table>

The means of both responses on every item were in the range of 3.50 to 4.50 which are classified as “agree”.

5. Discussion

The results from the unpaired samples t-test indicate that dictogloss is more effective than conventional grammar tasks such as multiple-choice questions and matching exercise in enhancing learners’ ability to learn and notice the target form. Unlike most grammar tasks on irregular verbs which are dependent on memorization and drilling (Sinhaneti & Kyaw, 2012; Tesarova, 2009; Setianingsih, 2010), dictogloss does not require learners to memorize the different structures of the irregular verbs as it is a task that enables learners to test and confirm their understanding of the target form (Swain & Lapkin, 1995) and learn about the inappropriate ways of applying the target forms (Sharwood Smith, 1993). This can be
attributed to the nature of dictogloss which explicitly emphasizes the correct conjugation of irregular verbs from simple present form into simple past form. The tasks required learners to convert every verb from the original text to past tense form including the irregular verbs followed by error analysis where the recreated text is compared with another version of the text in which the irregular verbs were applied correctly.

According to findings from questionnaire, the learners agreed that most aspects of the tasks helped them to notice the irregular verbs better and remember them more effectively although they were not required to memorize the irregular verbs. Tesarová (2009) stated that students need sufficient opportunity to be familiar with irregular verbs and this suggests that memorizing the different forms of irregular verbs may be unnecessary. It is possible that students have become familiar with the past tense forms of irregular verbs through dictogloss which can be attributed to its several features. Dictogloss demands learners to comprehend the message of the original text, identify important points, exercising different cognitive processes of solving the tasks (matching, ordering and listing), use their knowledge of the target language to recreate the texts in a different version, identify the verbs, tap into their knowledge of grammar to alter the verbs into their past tense forms, compare their text with another version, analyze their errors and any other skills pertinent to the tasks. Idek (2014) stated that demanding tasks can push learners to become cognitively involved in active processing the target forms as well as routinize the operations needed in dealing with particular grammatical forms that assist learners to become competent in using the target forms. In addition, the requirement for learners to compare their texts and analyze their errors also helped them to develop explicit knowledge of the target forms (Widodo, 2006) as it enables them to construct and confirm their hypothesis of how the target form is applied (Mull, 2013). In general, these features of the tasks facilitate learners’ noticing of the irregular verbs and retain them in their memory which is consistent with the noticing concept (Schmidt, 1990) and consciousness-raising approach (Ellis, 2003).

6. Conclusion

The dictogloss which was specifically developed for learners to learn irregular verbs is effective in fulfilling the goal without the need for drilling and rote learning. The prominent features of this task such as conversion of irregular verbs from present to past forms, recreating the texts and error analysis push learners to be more cognitively and consciously involved in processing irregular verbs in order to complete the tasks. Hence, dictogloss can be applied and further developed to assist students across various educational institutions to master irregular verbs.

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