The Importance of Text Structure Awareness in Promoting Strategic Reading among EFL Readers

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Abstract

Making EFL/ESL students aware of effective and efficient reading strategies that assist in the reading of English texts has been the concern of educators and researchers, and specifically reading instructors for years. Dissatisfaction with the current methods of teaching English and awareness of the positive effect of strategy training has led teachers in Iran to adopt holistic approaches to text processing. Of equal concern is to make students metacognitively aware of strategies and techniques that promote reading comprehension in terms of the macro level characteristics of the text. Text structure knowledge has been recognized as an efficient strategy that enhances reading comprehension. To this end, 85 Iranian EFL learners were provided with instruction on discourse structuring signals (transitional words, frame markers, endophoric markers, code glosses, and punctuation marks) during one semester. The results demonstrated that metacognitive awareness of text structure and overt teaching of textual features facilitate students’ reading comprehension.

1. Introduction

Recent views of looking at written texts as a dialogue that takes place between reader and writer require that readers move beyond words and sentences to discourse and be equipped with knowledge of certain textual...
characteristics and strategies that guide their reading. Generally, texts have two kinds of information: content information (content schemata) and structural information (formal schemata). Readers use content information to construct a meaningful mental representation of a text; and they use structural information to help them organize the content and thus facilitates the process of making meaning of a text. Lack of sensitivity to structural information of texts is stated as one of the factors that leads to comprehension difficulties (Williams, 2007). Text-structure awareness which according to Grabe (2009) includes recognizing, and attending to, a number of discourse-signaling systems, has been shown to be an effective reading strategy for improving reading comprehension and recall of information (Carrell, 1984, 1985, 1992; Meyer & Poon, 2001; Koda, 2005; Laureate Martinez, 2008). Making students aware of the rhetorical organization of texts also contributes to reading fluency and efficiency (Villanueva de Debat, 2012). Similar terms such as discourse structure, discourse pattern, text type, rhetorical organization, and top-level structure are used interchangeably with text structure and refer to the way information is organized in a text. According to Grabe (2002: 10) “Discourse, or text, structures can be understood as knowledge structures or basic rhetorical patterns in texts.”

Many students are unaware of the structural organization of texts, especially expository text and face many problems while reading such texts. Considering the fact that most academic texts are expository in nature, making students aware of expository text structure seems to be a necessity (Nambiar 2005). They should be taught to recognize and use structural organization of text to improve comprehension and recall. As a reading comprehension strategy, expository text structure awareness should be explicitly taught (Dymock, 2005). Grabe (2009) states that students need to know that texts are not the collection of words or sentences but they have rhetorical structures that organize information in a way that serve writers' purposes and when instructing text organizing features, students should be made aware that it is writers' goals and expectations that determine basic discourse organization.

Instruction designed to teach text-structure strategies has been found to improve the reading comprehension of English native language learners (Pearson & Duke, 2002; Dymock, 2005; Williams, 2005; Meyer & Poon, 2001) as well as ESL (Carrell, 1992; Lukica, 2011; Jiang & Grabe, 2007), and EFL learners (Vahidi, 2008; Zhengfang, 2006; Namjoo & Marzban, 2012). However, empirical research on the effect of text structure awareness is still scarce in the EFL context of Iran where students as well as teachers still focus on micro levels of texts neglecting the role that macro structure of texts has in reading comprehension. With such consideration the present study investigated the effect of teaching expository text structure strategies on reading comprehension of Iranian EFL university students. To teach discourse signaling and rhetorical organization of texts the study employed a modified model of Hyland’s interactive metadiscourse. In particular this study addressed the following questions:

1. Does the instruction of discourse organizing features (interactive metadiscourse) as macro structure of texts have any significant effect on Iranian EFL learners’ reading comprehension?
2. Does the instruction of discourse organizing features have any significant effect on reading comprehension of Iranian EFL learners of different levels of language proficiency?

2. Background of the study

In an English as a Foreign Language (EFL) setting like Iran where English has very little or no use in the everyday lives of EFL learners, English texts are the main source of language input. Thus, reading comprehension is the most important skill which is believed to have a central role in learning new information and in students’ academic success. For this reason great emphasis is given to enhance learners’ reading abilities (Iranmehr, Erfani, & Davari, 2011). However, despite the great attention given to reading skill, EFL learners entering university have problems comprehending English texts. Applying Grammar Translation method to teach reading comprehension with over emphasis on decoding and ignoring higher level processes involved in reading is regarded as one of the major sources of learners’ poor reading comprehension (Riazi & Mosalanejad 2010). In school, most of the class time is spent explaining grammatical points and giving the meaning of individual words,
and translating passages from English into Persian or vice versa. As Shokrpour and Fotovatian (2007) point out paying attention to single words, translation, and looking up all new words are regarded as inefficient reading strategies and take EFL reader’s attention from higher order strategies. What learners can get help from is employing some more effective reading strategies which enable them to have a global look at a text and use some textual features of texts to help them in comprehending a text. However, they have not acquired this ability in school and most of them face reading comprehension difficulties when they enter university.

Researchers believe that lower-level processes are necessary components of L2 reading comprehension but reading is not a single factor process as Nassaji (2003: 261) states reading “… is a multivariate skill involving a complex combination and integration of a variety of cognitive, linguistic, and nonlinguistic skills”. The complex nature of reading process then requires readers especially EFL/ESL readers to be equipped with a range of strategies proven to help readers while reading.

Hyland (2005: 50) notes that writers employ text organizing signals (interactive metadiscourse) to generate a text that readers find coherent and convincing. These features he notes are not simply text organizing signals but their use depends on “writer's assessment of the reader's assumed comprehension capacities, understandings of related texts, and need for interpretive guidance, as well as the relationship between the writer and reader.” He adds that knowledge of and attending to text organizing signals informs learners about where writers are and where they are going. Frame markers for example structure the discourse (e.g. this chapter focuses on organizational matters rather than on personal factors that affect strategic decision) and endophoric markers refer readers to certain sections in the texts (e.g. this is very much like the example we gave above at the beginning of chapter 1). The present study incorporated teaching text structuring strategies into three tertiary reading classes employing Hyland’s (2005) modified model of interactive metadiscourse. There are five categories in this model: transition markers, frame markers, endophoric markers, evidentials, code glosses, and punctuation marks.

3. Methodology

3.1. Participants

In order to examine the effect of teaching text structure and discourse signaling features to Iranian EFL learners, 170 undergraduate students (85 students in treatment group and 85 students in control group) majoring in English from Islamic Azad University in Tehran participated in this study. Their age ranged from 19-27.

3.2. Instruments

Two instruments were used in this study: Oxford Placement Test (OPT) consisting of 60 items on vocabulary, grammatical points, and reading comprehension was used to divide the participants into three groups of high, medium, and low in terms of their language proficiency. A reading comprehension test consisting of four passages and 20 multiple choice questions was developed for the purpose of this study to measure students’ knowledge of textual features before and after the instruction.

3.3. Strategies teaching procedures

170 students were randomly divided into two groups of treatment and control group. First, OPT was administered to both groups and based on students’ scores they were divided into three different levels of language proficiency, namely: low, average, and high. During one academic semester students in the treatment group received instruction on textual features based on a modified model of interactive metadiscourse proposed by Hyland (2005). He introduced five categories of interactive resources: transition markers, frame markers, endophoric markers, evidential, and code glosses. To suit the purpose of this study two modifications were
applied to the model: first, the category of evidentials was omitted from the model, because evidentials are mostly encountered in long passages such as research articles whereas the passages in students’ course books were of one or two pages in length on general topics. Another modification applied to the model was the inclusion of a new category, punctuation marks. The reason to include punctuation marks is that it has an important role in helping the reader infer the structure of a discourse and as Crismore, Markkanen and Steffensen (1993: 48) state “these marks can signal text glosses and clarification as well as uncertainty, certainty, and attitude.” The model has five categories as described below:

3.3.1. Interactive resources

Interactive resources “are used to organize propositional information in ways that a projected target audience is likely to find coherent and convincing” (Hyland, 2005: 50). There are five interactive categories in a modified model of interactive metadiscourse as follows:

Transition markers

Conjunction and adverbial phrases are the major transition markers. These markers help readers make connection between steps in an argument. Addition markers, for example, add elements to an argument and consist of items such as and, furthermore, by the way, etc. comparison markers mark similarities (similarly, likewise, equally, in the same way, etc.) or differences (in contrast, however, but, on the contrary, etc.). Consequence relations tell the readers that a conclusion is made (thus, therefore, consequently, in conclusion, etc.) or an argument is countered (admittedly, nevertheless, anyway, in any case, of course, etc.).

Frame markers

These markers provide framing information about elements of the discourse and signal text boundaries, making the discourse clear for the readers. They function to sequence parts of a text (first, then, a/b, at the same time, next), label text stages (to summarize, in sum, by way of introduction), mark discourse goal (I argue here, my purpose is, there are several reasons why, etc.) or indicate topic shift (now let us return to, well, right, now, etc.).

Endophoric markers

Endophoric markers are used to refer to other parts of the text (see Figure 2, refer to the next section, as noted above) and aid the reader to understand the writer’s meaning by referring to earlier material or anticipating the material to come. Through these markers writers guide readers through the discussion and direct them to a preferred interpretation of discourse.

Code glosses

Code glosses are indication of writer’s prediction of reader’s knowledge and are used to provide additional information by rephrasing or explaining what has been said to ensure the reader’s understanding of writer’s intended meaning (this is called, in other words, that is, this can be defined, for example, etc.).

Punctuations

Punctuations signal text glosses and clarification, uncertainty, certainty, and attitude. Apostrophes, comma, colon, exclamations, question marks, quotation marks, semicolons are included in this category.

In each session of regular class time while working on different reading passages, the instructor would call students’ attention to instances of interactive resources they encountered in the text. Instruction of interactive resources as discourse signaling and structuring strategies was provided by the instructor through direct
explanation, questioning, modeling, and continually recycling of strategies by providing students with different examples of a category, defining their functions in different passages and asking students to identify instances of these signals in the texts or asking them to provide more examples of themselves. Finally, at the end of the semester post test was administered to both treatment and control group to find out whether students who received instruction of this kind had any improvement compared to control group.

4. Data analysis

To compare students’ performance on pre and post reading comprehension test (RCT henceforth) among treatment group the appropriate statistical method, paired sample T test, was conducted by using SPSS software. The finding showed that there is a statistically significant difference between scores of pre and post RCT among treatment group t (84) = -18.4, p = 0.00. In other words, teaching of interactive metadiscoursal features had a positive effect on the improvement of students’ performance in RCT. Table 1 presents the result of paired sample tests.

Table 1. Paired sample t test for level of improvement in RCT scores for treatment group

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCT (Pre)</td>
<td>-2.8</td>
<td>1.4</td>
<td>0.2</td>
<td>Lower -3.1 Upper -2.5</td>
<td>-18.4</td>
<td>84.0</td>
<td>.000</td>
</tr>
<tr>
<td>RCT (Post)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Paired sample t test was also used to test the difference between the pre and post RCT scores among control group. Table 2 indicates that there is no significant difference statistically between pre and post RCT scores among control group t (80) =-0.3, p=0.743.

Table 2. Paired sample t test for pre and post RCT among control group

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCT (Pre)</td>
<td>0.0</td>
<td>1.4</td>
<td>0.2</td>
<td>Lower -0.3 Upper 0.2</td>
<td>-0.3</td>
<td>80.0</td>
<td>0.743</td>
</tr>
<tr>
<td>RCT (Post)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.1. Comparison between treatment and control groups in RCT test score

To compare the performances of students in treatment and control group on RCT, t-test was used to test the difference between levels of improvement in RCT scores of two groups. The result is presented in Table 3. Findings showed that there was a significant difference between treatment and control groups in the level of improvement in RCT score with equal variances assumed t (164) =12.8, p = 0.000. So we can conclude with 99.9% confidence that treatment group had more improvement in RCT score than control group. In other words, the instruction of interactive metadiscoursal features helped students improve in their performances on RCT.
Table 3. t-test result for treatment and control groups in level of improvement in RCT score

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>F 1.1 Sig. 0.291 t 12.8 df 164 Sig. (2-tailed) 0.000 Mean Difference 2.7 Std. Error Difference 0.2 Lower 2.3 Upper 3.1</td>
<td></td>
</tr>
</tbody>
</table>

| Equal variances not assumed | 12.8 163.9 0.000 2.7 0.2 2.3 3.1 |

4.2. Comparison between two groups in terms of students’ levels of language proficiency

To compare the performances of students in treatment and control group on pre and post RCT in all three levels, comparison of mean level of improvement in RCT scores of two groups is performed. In order to do this, the score of post RCT is subtracted from the score of pre RCT for each group and then compared with each other. Table 4 shows that the level of improvement of RCT scores of students in treatment group with low (M=3.1, SD=1.3), average (M=2.9, SD=1.4), and high (M=2.1, SD=1.2) level of language proficiency were more than level of improvement of RCT scores of students in control group with low, average, and high language proficiency (M=0.2, SD=2.1), (M=-0.1, SD=1.3) and (M=0.7, SD=0.6) respectively.

Table 4. Descriptive and statistical information on the level of improvement in RCT score for treatment and control groups in terms of their language proficiency

<table>
<thead>
<tr>
<th>OPT Level</th>
<th>Group</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Treatment</td>
<td>3.1</td>
<td>17</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>.2</td>
<td>11</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.9</td>
<td>28</td>
<td>2.2</td>
</tr>
<tr>
<td>average</td>
<td>Treatment</td>
<td>2.9</td>
<td>52</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>-.1</td>
<td>55</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.3</td>
<td>107</td>
<td>2.0</td>
</tr>
<tr>
<td>High</td>
<td>Treatment</td>
<td>2.1</td>
<td>16</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>.7</td>
<td>15</td>
<td>.6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.4</td>
<td>31</td>
<td>1.2</td>
</tr>
</tbody>
</table>

An appropriate statistical technique Mann-Whitney test was used to test the difference between the level of improvement in RCT score of two groups, treatment and control group in terms of three levels of language proficiency. The results are presented in Table 5 which showed a significant difference between the treatment and control groups in the level of improvement in RCT score in low, average and high levels of language proficiency (z= -1.9, p=0.059), (z= -4.5, p=0.000), (z= -4.1, p=0.000), respectively. So based on the Table 5 we can conclude with 99% confidence that treatment group had more improvement in RCT score than control group in all levels of language proficiency. In other words, all students with different levels of language proficiency in treatment group benefited from the instruction of interactive metadiscoursal features.
Table 5. Mann-Whitney test result

<table>
<thead>
<tr>
<th>OPT Level</th>
<th>Statistics</th>
<th>Value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>low</td>
<td>Z</td>
<td>-1.9</td>
<td>0.059</td>
</tr>
<tr>
<td>Moderate</td>
<td>Z</td>
<td>-4.5</td>
<td>0.000</td>
</tr>
<tr>
<td>High</td>
<td>Z</td>
<td>-4.1</td>
<td>.000</td>
</tr>
</tbody>
</table>

5. Discussion and conclusion

As the data analysis indicates, students in the treatment group who received instruction in text structure strategies outperformed students in the control group in post reading comprehension test (RCT) administered at the end of the semester. The results of the study are in line with previously conducted studies that an awareness of discourse signaling features as macro level structure of texts improves students’ reading comprehension. Moreover, a significant improvement is observed when students’ performance on pre and post RCT within the treatment group is compared, while the same comparison between pre and post RCT scores among control group does not indicate such improvement. This means that conventional reading instruction is not as efficient as strategies embedded reading instruction.

To sum up, based on the findings of this study, the following conclusions can be made. First, Hyland’s modified model of interactive metadiscourse can be used in reading classes as a suitable and efficient taxonomy to teach essential macro structural features of expository texts. Second, tertiary students in all levels of language proficiency benefit from instruction of text structure strategies. Third, making students aware of discourse organizing features of expository texts can help them overcome the challenges they face in comprehending such texts. Forth, the benefits of teaching textual features through modified model of interactive metadiscourse are twofold. First it enables the reader to see a text as a whole with connected parts (this is particularly done by transitions and endophoric markers). Second, these features enable the reader to interact with the author behind the text who tries to facilitate the process of reading through a well organized text.

In conclusion language teachers especially reading teachers are encouraged to incorporate instruction of a wide array of strategies in their reading classes. The strategy instruction should not be as a separate teaching session but it should call students’ attention when the time is ripe in all pre, during, and post reading activities. Introducing and instructing specific strategies do not suffice; strategies should be introduced, modelled, and practiced continuously until it finally leads to independent use of strategies by students.

References


