International Conference on Current Trends in ELT

The Effect of Teaching Metacognitive Strategies on Field-dependent and Independent Learners’ Writing

Mania Nosratinia\textsuperscript{a,}\textsuperscript{*}, Shirin Adibifar\textsuperscript{b}

\textsuperscript{a,b}Islamic Azad University, Central Tehran, Tehran 1467686831, Iran

Abstract

The current study aimed at investigating the effect of metacognitive strategy instruction on the writing performance of field-dependent and field-independent intermediate learners. To fulfill the purpose of this study, 62 male and female intermediate EFL learners with the age range of 18-35 were selected as homogeneous learners and were given Group Embedded Figures Test (GEFT) in order to be characterized as either field-dependent or field-independent. Then, they were divided into two groups of experimental and control and both took a pretest of writing. The experimental group received metacognitive strategy training, while the control group received the usual teaching program of the language school. At the end of the training, a writing post-test was administered to both groups. The results revealed that the experimental group did statistically better in their post-test. Moreover, field-independent learners outperformed field-dependent ones in their post-test. The findings draw attention to the benefits of teaching strategies especially when dealing with writing courses.

© 2014 Nosratinia and Adibfar. Published by Elsevier Ltd.

Keywords: Metacognitive strategies; Field dependent and field-independent; Writing performance

1. Introduction

Writing is a basic communication skill and a unique asset in the process of learning a second language (Chastain, 1988, p. 244). Writing is a creative process by which the writer creates a text for the reader. It is a process through which the writer involves in "a two-way interaction between continuously developing knowledge and continuously developing text" (Bereiter & Scardamalia, 1987, p. 12). Since writing has been a neglected area in language teaching for many years, most foreign language professionals have considered writing as "secondary" or less crucial skill in comparison with listening, speaking, and reading (Celce-Murcia, 2001).

* Corresponding author.

E-mail address: mania_nosratinia@yahoo.com

© 2014 The Authors. Published by Elsevier Ltd. Open access under CC BY-NC-ND license. Selection and peer-review under responsibility of Urmia University, Iran.

doi:10.1016/j.sbspro.2014.03.557
Emig (1997) believes that writing is the most complex and challenging skill since it involves "originating and creating a unique verbal product that is graphically recorded" (p. 8) and it requires conscious effort and practice in composing, developing, and analyzing ideas. Hence, as a complex activity there is no wonder that L2 language learners usually encounter difficulties in developing their writing (Evans, Hartshorn, McCollum, & Wolfersberger, 2010).

According to Emig (1997), writing needs to be learned only with formal and systematic training. Also, writing instructors have noticed that for many students it is a difficult skill to acquire in their native language, let alone in a foreign one. Accordingly it seems vitally important that researchers take into consideration different variables and factors that affect writing.

To develop learners' writing abilities, effective strategies and tools should be carefully considered (Oxford, 1990; Celce-Murcia, 2001). Strategies are specific actions, behaviors, or techniques that students (often intentionally) use in order to improve their progress in developing L2 skills. These strategies have a facilitative role in the process of internalization, storage, retrieval, or use of the new language (Oxford, 1990).

Learning strategies can be defined as "the mental activities that people use when they study to help themselves acquire, organize, or remember incoming knowledge more efficiently" (Park, p. 35).

There are different learning strategy classifications by various scholars, among which one can refer to the classification of O'Malley, Chamot, Stewner-Manzanares, Russo, and Kupper, (1985) as one of the most prominent ones. They categorized learning strategies under three main groups:

1. Cognitive Strategies: are strategies which the learner uses to adjust the process of knowledge acquisition (e.g. repeating, translating, grouping, note taking, deducting, imagery, auditory representation, key word, contextualization, elaboration, and transfer);
2. Metacognitive Strategies: are general skills through which learners manage, direct, regulate, and monitor their learning (e.g. planning for learning, thinking about the learning process as it is taking place, monitoring of one's production or comprehension, and evaluating learning after an activity is completed); &
3. Socioaffective Strategies: are strategies that involve either interaction with another person or ideational control over affect (e.g. social-mediating activity and transacting with others).

Among learning strategies, metacognitive strategies are considered as the most essential ones in developing learners' skills (Anderson, 1991) and it was emphasized by O'Malley et al. (1985) that without metacognitive strategies learners will not be able to monitor their progress, accomplishments, and future learning directions.

Ellis (1994) referred to age, strength of motivation, type of motivation, types of goals, personal background of the learners, the language being learned, the beliefs of the learners regarding the language s/he is learning, and the task as the factors which affect strategy choice of learners and highlighted the role of aptitude, learning styles, personality factors, gender and socioeconomic status as the most influential factors on which little research has been done.

Learning style can be defined as those unchanging and prevalent characteristics of an individual which are conveyed through the interaction of one's behavior (Garger & Guild, 1984) and includes cognitive, affective, and physiological styles (Keefe, 1987). Among the various identified cognitive styles, field-dependence (FD) and field-independence (FI) have been suggested as "potentially important in second language acquisition" (Larson Freeman & Long, 1991, p. 193).

Riding and Rayner (1998) described FD/FI as the extent to which an individual is dependent on a perceptual field when analyzing an object that is part of the field.
According to the results of different researches (Abraham, 1985; Chapelle and Roberts, 1986; Ehrman & Oxford, 1989; Brown 1993), students' choice of learning strategies is influenced to a great extent by the learning styles of the learners and both styles and strategies affect learning outcomes. Many studies have been carried out to examine the role of metacognitive knowledge in learner's performance of receptive English skills, such as reading and listening (e.g., Baker & Brown, 1984; Vandergrift, 2002; Yang & Zhang, 2002; Xu & Tang, 2007). However, according to Abdollahzadeh (2010), little research has been conducted to investigate the role of metacognitive knowledge in EFL learners writing and very few researches have been conducted on writing strategies employed by Iranian learners in their English language writing (Hemmati & Soltanpour, 2012). Considering this gap, the major concern of the present study was to explore the effectiveness of metacognitive strategies instruction on the writing performance of FD and FI Iranian EFL learners.

2. Method

2.1. Participants

To fulfill the objective of this study, 62 male and female intermediate EFL learners with the age range of 18-35 studying in one of the language schools in Tehran participated in this study. These participants were non-randomly selected and homogenized through a piloted PET among 70 learners. The participants whose scores were one standard deviation above and below the mean were selected as the target sample of the study.

2.2. Instruments

The following instruments were utilized in this study:

A language proficiency test: The Cambridge Preliminary English Test (PET) was used in the study for homogenizing the subjects. PET is an exam for people who can use every day written and spoken English at an Intermediate Level. It tests four skills of reading, writing, listening, and speaking. Cambridge EFL tests (English as a Foreign Language) enjoy great respect and recognition at international level and enormous effort goes into ensuring both its validity and reliability. Each PET test takes approximately three years to produce. Before any task or questions are included in an actual examination, they are trailed on students at a suitable level in a process that is called "pretesting". This guarantees that the level of difficulty of all the examination material is the right one and it's not biased towards people from particular cultural or educational ethnic backgrounds at the expense of others. Only when all the material has been checked and UCLES is certain that it meets the correct standard is it used in actual question papers. In this study, the reliability of the test scores in the PET piloting phase was .91 and shifted to .93 after the deletion of two malfunctioning items. The reliability of PET in the actual administration for homogenization of the participants was .93.

Group Embedded Figures Test (GEFT): GEFT was used in order to classify the participants into two groups of field-dependent and filed-independent. The GEFT is a paper-based test consisting of seven practice items which should be completed in 1 minute and two other sets consisting of nine items which have the time limit of 5 minutes for each set. During the test, the participants were required to locate 18 simple geometric shapes, each located in a drawing of a larger, more complex pattern geometric shape. Scores on GEFT range from 0 (highly FD) to 18 (highly FI). While participants scoring below 11 were considered as field-dependent, those scoring 11 or above were identified as field-independent in this study. The published test manual reports a split-half reliability estimate of 0.82 for both females and males according to Spearman-Brown formula (Witkin, Oltman, Raskin, & Karp, 1971, p. 1).

Writing pre-test: The test was administered in order to check the homogeneity of the participants in writing. The students were required to write a 250-word composition on the topic "The Role of Television in Our Daily Lives". The students were given 40 minutes to write the composition. The rating was done by the researchers based on the Weir's writing rating scale (as cited in Cushing Weigle, 2002, p. 117).

Writing post-test: At the end of the treatment, all participants in both groups took a writing post-test to compare the results before and after the treatment. The students were required to write a 250-word composition during 40
minutes on the topic “The Role of Internet in Our Daily Lives”. The rating was done by the researchers based on the Weir’s writing rating scale (as cited in Cushing Weigle, 2002, p. 117).

It should be mentioned that a factor analysis through the varimax rotation is run to probe the underlying constructs of the pre-test and post-test of writing and the PET test (Table 1). The SPSS has extracted only one factor which accounts for 75.43 percent of the total variance.

Table 1. Total Variance Explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>2.263</td>
<td>75.431</td>
</tr>
<tr>
<td>2</td>
<td>.525</td>
<td>17.503</td>
</tr>
<tr>
<td>3</td>
<td>.212</td>
<td>7.066</td>
</tr>
</tbody>
</table>

Table 2 displays the factor loadings of the pre-test and post-test of writing and the PET test. Since all of these test load on a single factor, it can be concluded that they are tapping on the same underlying construct.

Table 2. Factor Loadings

<table>
<thead>
<tr>
<th>Component</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PET</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
</tr>
<tr>
<td></td>
<td>Pre-test</td>
</tr>
</tbody>
</table>

Rating Scale of Writing Pre-test and Post-test: The rating scale which was used for the purpose of both writing pre-test and post-test is an analytic writing rating scale by Weir (as cited in Cushing Weigle, 2002, P. 117). It consists of seven categories including: A. Relevance and adequacy of content, B. Compositional organization, C. Cohesion, D. Adequacy of vocabulary for purpose, E. Grammar, F. Mechanical accuracy (I: Punctuation), and G. Mechanical accuracy (II: Spelling). The band scores for each of these aspects of writing is 0-3.

2.3. Materials

All of the participants in this research study, received instruction based on "Top Notch 3B", by Joan Saslow, and Allen Ascher (2006) which consist of 5 units each unit includes 4 lessons. The main purpose of this book is to integrate speaking, grammar, vocabulary, pronunciation, listening, reading and writing, and prepares students to interact successfully and confidently with both native and non-native speakers of English. In this study, the students had to cover the three units (units 6, 7, and 8) which were about "Disasters and Emergencies", "Books and Magazines", and "Inventions and Technology" respectively.

2.4. Procedure

In order to conduct this research, the following steps were carried out.

Prior to the treatment, the PET test, was piloted among a group of 30 male and female students with almost similar characteristics of the representative sample. Then the three characteristics of individual items (Item Facility, Item Discrimination, and Choice Distribution) were calculated and two malfunctioning items were discarded from the test battery. The Cronbach Alpha formula was employed for calculating the reliability of the tests’ scores gained by the participants.

The already piloted PET was given to 70 intermediate level students of one of the language schools in Tehran who were selected non-randomly. Based on the obtained results, 62 students whose score fell between one standard
deviation above and below the mean were selected as the participants of the study. Then GEFT was administered among the 62 participants in order to classify them into two groups of field-dependent and field-independent based on their performance on the test. The participants who scored below 11 were considered as field-dependent (30 participants), and those who scored 11 or above were identified as field-independent (32 participants).

Then, the participants were randomly divided into two groups of Experimental Group (EG) (29 participants, 14 FD and 15 FI) and Control Group (CG) (33 participants, 16 FD and 17 FI) in such a way that the number of FD and FI learners in both groups were nearly equal.

To make sure that the students were not significantly different in terms of their writing ability (the dependent variable of the study), they were given a writing ability pre-test. The test was an in-class writing test in which students were given 40 minutes to plan, write and revise a composition within 250 English words. After their writings were handed in, they were scored by the researchers (R=.85) using an analytic writing rating scale by Weir (1999), the final score for each participant was the mean scores of the two ratings. All the participants were taught using the same material and they received the same amount of instruction. All classes comprising the two groups were instructed by the same teacher (one of the researchers). The only difference lay in the teaching of metacognitive strategies which was included in the experimental group. The course consisted of 17 sessions of 90 minutes spanning over a period of six weeks.

In the experimental group, the teacher (one of the researchers) teaches metacognitive strategies. The process of this teaching was carried out in two phases. In "The First Phase" the teacher familiarized the students with the principles of these strategies (Based on O'Mally and Chamot's Model, 1989), in "The Second Phase" the teacher taught the students how to use these strategies practically in their writing (Based on Oxford's Model, 1990).

**The First Phase**

During each session, one or two metacognitive strategies were introduced, explained, demonstrated, and practiced. The main strategies are shown in Table 3.

<table>
<thead>
<tr>
<th>Table 3. Metacognitive Strategies Based on O'Mally and Chamot's Model (1989)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metacognitive Strategies</strong></td>
</tr>
<tr>
<td>Advance Organizers</td>
</tr>
<tr>
<td>Direct Attention</td>
</tr>
<tr>
<td>Selective Attention</td>
</tr>
<tr>
<td>Self-management</td>
</tr>
<tr>
<td>Functional Planning</td>
</tr>
<tr>
<td>Self-monitoring</td>
</tr>
</tbody>
</table>
The strategies were presented in a direct, explicit, and informed way and in each session, the target strategy was labeled and given a rationale, and adequate of opportunities were offered to compare and evaluate the strategies.

**The Second Phase**

According to Lv and Chen (2010) metacognitive experience in writing refers to "cognitive experience and emotional experience which occur during the writing process" (P. 65). As a result during all the sessions of teaching metacognitive strategies and when the students were required to do a writing task, the researcher tried to help them ask themselves questions like "Is the topic clear for me? Does this writing transfer the message? Have my reader understood what I tried to convey?" (The cognitive part). As for the Emotional part, the researcher tried to arouse students' interests and motivation for writing. In order to do so the researcher asked about the students' interests, organized free discussions about different topics that students were going to write about later, and even asked them to write about the movies they liked or diaries, for example, as their weekly writing assignments.

The metacognitive strategies were divided into three main categories: "Centering the Writing", "Arranging and Planning the Writing", and "Evaluating Writing".

In "Centering the Writing" Pre-writing Planning, the students should think about the content, recalled the strategies they had already known and tried to use them while writing and in the second part the students should also consider the readers’ perspective of this writing.

In the second phase, "Arranging and Planning the Writing" i.e., (Finding Ways to make Writing more effective), the students analyzed the topic, generated/gathered ideas for the content (brainstorming), put ideas in a draft, organized and ordered ideas, made an outline and finally, wrote the draft.

And during the last part, "Evaluating Writing", the students had to employ self-monitoring strategies which helped them to assess their writing process and take some sort of corrective action.

The metacognitive strategies that were introduced, explained, demonstrated, and practiced are shown in Table 4.

<table>
<thead>
<tr>
<th>Metacognitive Strategies</th>
<th>Centering the Writing</th>
<th>Pre-writing Planning;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Planning and Organizing for Writing)</td>
<td>Thinking from readers' perspective.</td>
</tr>
<tr>
<td>Arranging &amp; Planning Writing</td>
<td></td>
<td>Goal-setting;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identifying the purpose of the writing task; &amp;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brainstorming.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metacognitive Strategies</th>
<th>Centering the Writing</th>
<th>Pre-writing Planning;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Planning and Organizing for Writing)</td>
<td>Thinking from readers' perspective.</td>
</tr>
<tr>
<td>Arranging &amp; Planning Writing</td>
<td></td>
<td>Goal-setting;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identifying the purpose of the writing task; &amp;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brainstorming.</td>
</tr>
</tbody>
</table>
The process of metacognitive strategy instruction was carried out in 17 sessions. In each session students, were to write and hand in a composition, so that the researchers could check on their progress.

At the end of the treatment phase, all participants in both groups took a writing post-test to compare the results before and after the treatment. Since the last unit which had to be covered was about "Inventions & Technology", the researchers chose "The Role of Internet in Our Daily Lives" as the topic of their post-test. The students were required to write a 250-word composition during 40 minutes.

The rating was done by the researchers (R=.93) based on the Weir's writing rating scale (as cited in Cushing Weigle, 2002, P. 117). For each participant, the average of the two scores provided by the raters was considered as their post-test score and was compared to that of their pre-test.

3. Results

Having checked the homogeneity of the participants before the treatment, the researcher ran a paired-samples \( t \)-test to compare the field-dependent (FD) students' means on the pre-test and post-test of writing performance. The results of the paired-samples \( t \)-test indicated that there is a significant difference between the FD students' mean scores on the pre-test and post-test of writing (Table 5) and demonstrated that FD students, after receiving metacognitive strategies, showed a significant improvement in their writings.

Table 5. Paired-Samples \( t \)-test Pre-test and Post-test of Writing (FD Group)

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>( t )</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Std.</td>
<td>Std. Error</td>
<td>95% Confidence Interval of the Difference</td>
</tr>
<tr>
<td>Mean</td>
<td>Deviation</td>
<td>Mean</td>
<td></td>
</tr>
<tr>
<td>2.983</td>
<td>2.644</td>
<td>.483</td>
<td>1.996</td>
</tr>
</tbody>
</table>

Another paired-samples \( t \)-test (Table 6) was run to compare the field-independent (FI) students' means on the pre-test and post-test of writing performance. The results of the paired-samples \( t \)-test indicated that there is a significant difference between the FI students' mean scores on the pre-test and post-test of writing. Accordingly, the FI students, after receiving metacognitive strategies, showed a significant improvement in their writings.

Table 6. Paired-Samples \( t \)-test Pre-test and Post-test of Writing (FI Group)

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>( T )</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error</td>
<td>Mean</td>
</tr>
<tr>
<td>Mean</td>
<td>Deviation</td>
<td>Mean</td>
<td></td>
</tr>
<tr>
<td>6.031</td>
<td>4.117</td>
<td>.728</td>
<td>4.547</td>
</tr>
</tbody>
</table>
A two-way ANOVA was run to investigate the effect of cognitive style of field-dependence and field-independence as well as the effect of teaching metacognitive strategies on the EFL learners’ performance on the writing post-test. The F-observed value for the effect of the cognitive style (FD vs. FI) on the writing ability of the EFL learners (Table 7) indicated that the cognitive style of FD and FI have a significant effect on the performance of the EFL students on the writing test.

Table 7. Two-Way ANOVA Post-test of Writing by Cognitive Styles of Two Groups

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDFI</td>
<td>174.124</td>
<td>1</td>
<td>174.124</td>
<td>16.979</td>
<td>.000</td>
<td>.226</td>
</tr>
<tr>
<td>Group</td>
<td>78.582</td>
<td>1</td>
<td>78.582</td>
<td>7.662</td>
<td>.008</td>
<td>.117</td>
</tr>
<tr>
<td>FDFI * Group</td>
<td>18.959</td>
<td>1</td>
<td>18.959</td>
<td>1.849</td>
<td>.179</td>
<td>.031</td>
</tr>
<tr>
<td>Error</td>
<td>594.822</td>
<td>58</td>
<td>10.256</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20734.250</td>
<td>62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As displayed in (Table 8) the FI group outperformed the FD group on the writing post-test.

Table 8. Descriptive Statistics of Post-test of Writing by Cognitive Styles (FD & FI)

<table>
<thead>
<tr>
<th>FD FI</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Dependent</td>
<td>16.193</td>
<td>.590</td>
<td>15.013</td>
</tr>
<tr>
<td>Field Independent</td>
<td>19.563</td>
<td>.566</td>
<td>18.429</td>
</tr>
</tbody>
</table>

The F-observed value for the effect of the cognitive styles (FD vs. FI) on the writing ability of the EFL learners indicated that teaching of metacognitive strategies has a significant effect on the performance of the EFL students on the writing test. As displayed in (Table 9) the experimental group outperformed the control group on the writing post-test. Based on the results discussed above it can be concluded that there is a significant difference between the effect of teaching metacognitive strategies on FD EFL learners' writing performance and FI EFL learners' writing performance. The F-values for the effects of the cognitive styles (FD/FI) and teaching metacognitive strategies indicate that both of the independent variables have significant effects on the performance of the EFL students on the writing post-test.

Table 9. Descriptive Statistics Post-test of Writing of Two Groups

<table>
<thead>
<tr>
<th>FD FI</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>19.010</td>
<td>.598</td>
<td>17.813</td>
</tr>
<tr>
<td>Control</td>
<td>16.746</td>
<td>.558</td>
<td>15.630</td>
</tr>
</tbody>
</table>

The F-observed value for the interaction between the cognitive styles (FD vs. FI) and teaching metacognitive strategies on the writing ability of the EFL (Table 10) indicated that there was not any significant interaction
between the teaching of metacognitive strategies and cognitive styles. As displayed in (Table 10) the FD and FI students in experimental group show higher mean scores on the writing post-test than control group.

Table 10. Descriptive Statistics of Writing post-test of FD and FI Students

<table>
<thead>
<tr>
<th></th>
<th>FDFI Group</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>Field-dependent</td>
<td>Experimental</td>
<td>16.769</td>
<td>.888</td>
<td>14.991</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>15.618</td>
<td>.777</td>
<td>14.063</td>
</tr>
<tr>
<td>Field-independent</td>
<td>Experimental</td>
<td>21.250</td>
<td>.801</td>
<td>19.647</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>17.875</td>
<td>.801</td>
<td>16.272</td>
</tr>
</tbody>
</table>

4. Discussion

The present study focused on the metacognitive strategies instruction. After 17 sessions, the researcher came to the end of the treatment. Having collected the data, the researcher went through the process of their analysis and came up with the results.

The statistical analysis of the data revealed that the improvement in the writing performance of FD and FI participants in the experimental group, in comparison to their previous stage, was due to the introduction of a specific variable which was the metacognitive strategy instruction.

Moreover, based on the statistical analysis of the data which was done for the comparison between FD and FI learners’ post-tests in experimental group, it was concluded that FI participants showed more improvement in their writing post-tests than FD ones, in other words FI learners outperformed FD learners in their writing post-test.

When the findings of the present research were discussed with the results found in literature, it was revealed that just like other related studies (Lin & Davidson, 1994; Luck, 1998; Daniels & Moore, 2000) FI learners are more successful and achieve better outcomes comparing to FD ones.

Moreover, this study was in line with the findings of Lv and Chen (2010), according to which the metacognitive strategy training has main effect on the experiment and the students in experimental group have made great progress in their writing performance.

To sum up, the data from this empirical study proves that metacognitive strategy instruction is fruitful and it can help to improve the writing performance of both FD and FI students.

References


Vandergrift, L. (2002). It is nice to see that our predictions were right: Developing metacognition in L2 listening comprehension. *The Canadian Modern Language Review, 58,* 555 - 575.

