

The Role of Critical Thinking Orientation on the Learners' Use of Communicative Strategies

Ramin Asadi Jamnani*

Department of English, Islamic Azad University, Tonekabon Branch, Tonekabon, Iran

Raminasadi48@gmail.com

Davood Mashhadi Heidar

Department of English, Islamic Azad University, Tonekabon Branch, Tonekabon, Iran

Davoodm-tarbiatmodares@yahoo.com

Abstract

The present study aimed to explore the impact of teaching critical thinking skills through applying debate on the use of communicative strategies. At first 60 intermediate students were selected and placed in two homogenous groups of control and experimental through passing Nelson test. Then, a critical thinking appraisal was run to the two groups both before and after the treatment. The treatment that experimental group received during the term was 10 sessions of debate as a classroom activity. The analysis of the collected data exhibited significant difference between the two groups concerning critical thinking skill. The results showed that the subjects in experimental group were oriented toward critical thinking. In a subsequent stage, the subjects were asked to write a story in English based on a series of related pictures. Then, the number of communicative strategies including achievement and reduction ones were counted carefully. A t-test was run to find whether the differences between the two groups regarding the use of such strategies were significant or not. The results revealed that the subjects in experimental group used more achievement strategies. Concerning the use of reduction strategies by the two groups no significant difference was found.

Keywords: critical thinking skill, reduction strategies, achievement strategies, thinking appraisal

Introduction

Critical thinking defined as 'how to think' effectively about the subject matters (Shuffersman, 1991) seems to be a major problem in Iran's education system owing to the fact that teachers customarily attempt to teach the content rather than the method. According to Paul (1990), students achieve lower order learning that is associative, and rote memorization leading to misinterpretation, prejudice, and dissuasion where students develop techniques for short term memorization and presentation. These techniques prevent the students' from thinking critically on what they learn. Under such conditions, teachers, following their traditional teaching, ignore the learners' views and ideas, not giving them the chance to state themselves. As a result, students do not implement their critical thinking abilities to analyze and understand the subject matters.

Encouraging critical thinking in education has been an issue offering many opposing ideas on the extent to which critical thinking can be taught. A range of approaches and patterns have been developed to teach and assess critical thinking. Additionally, instructing critical thinking skills has posed many issues including cultural and emotional ones as well as transferability and generalizability of what is taught. In spite of such opposing ideas and opinions on teaching critical thinking skills, everybody agrees that thinking critically is the basic aim of education (Reed, 1998). The present study seeks to explore the potential effect of critical thinking on the use of communicative strategies.

Strategies of communication fundamentally deal with ends and means. Concerning a native speaker, it is presumed that these are actually in balance in the sense that he/she always possesses the linguistic resources to express the messages he/she wishes to convey. With respect to a learner; nevertheless, these resources are not in balance. At times, the learner wishes to express messages which his linguistic resources don't enable him to convey efficiently. While in interaction, when the learner finds himself/herself encountered with this situation, he/she has merely two choices. He can either adapt his message to the resources he has accessible that is to regulate his ends to his means. These processes are named message adjustment strategies, risk-taking strategies or reduction ones. The next option is to enlarge his resources by one means or another to realize his communicative purposes. These are labeled resource expansion strategies or achievement ones.

Adjustment or reduction strategies at one extreme contain *topic avoidance*, a rejection to enter into or carry on a discussion within some field or topic due to a sense of entire linguistic insufficiency. Topic avoidance that is a less tremendous type is actually message *abandonment*: trying but giving up. A less sensitive sort of message adjustment is semantic avoidance which indicates something that is somewhat different from what you aimed, but still generally pertinent to the topic of discussion. Finally, the least severe type of message adjustment is *reduction*: which means saying less, or less accurately than what you aimed to say.

As Corder (1981) asserts, concerning the resource expansion strategies the situation is not the same. Here, the techniques cannot be arranged in line with a hierarchy. Different strategies can be employed concurrently. Such strategies are risk-taking, in the sense that learners endanger themselves and possibly run the risk of failure, i.e. misunderstanding or communication collapse. The most apparent strategy, is *borrowing* that is the employment of linguistic resources except the target language. It is an endeavor to create or borrow items, approximately based on the rules of the target language structure to the extent that the learners' interlanguage permits. The extreme sort of borrowing is basically *switching* to another language. Whereas a less risk-taking strategy is to make use of *paraphrase* or *circumlocution*, which means getting round your problem with the information you have. *Paralinguistic* devices are regarded as resource-expansion strategies as well. Normally, they include gestures or requesting help from the interlocutor for a word or term. This is not an extreme type of risk-taking strategy.

Background to the study

It seems the concept of critical thinking has encountered flexible definitions. Wright (2002) sought an appropriate definition through clarifying the concept of critical thinking and deciding what problem the definition should help to solve. He believes that as far as teaching is concerned, for instance, the definition tends to assist teaching and assessing critical thinking in school classrooms. Accordingly, the definition aims to conserve the nucleus meaning of the original concepts employed to define critical thinking. Kabilan (2000) stressing the unavoidability of teaching critical thinking skills in EFL contexts, states that language learners can be skillful through acquiring the mechanisms of language, stressing that learners can get skillful through employing the language not learning about language. Today it is emphatically supposed that using language and knowing the meaning don't result in the proficient learners. They need to exhibit creative and critical thinking by means of language to state and sustain their ideas creatively and critically. However, he maintains that critical thinking skills should not be taught unconnectedly but they must be included in the curriculum. Paul (2004) emphasizes the link between critical thinking and reading comprehension.

As he believes, the reflective mind recovers its thinking through reflectively thinking about it. Similarly, it improves its reading by means of reflectively thinking about how it is reading. Facione (1992) also proposes that there is a noteworthy correlation between critical thinking and reading comprehension.

Over the last two decades, there has developed a unanimous belief that it is not sufficient to teach learners to manipulate the language structures. They must also develop strategies for relating these structures to their communicative functions in the real world. It has grown out of the realization that learning grammatical forms and structures does not adequately prepare learners to use the language they are learning effectively. The studies on communicative strategies attempt to reveal how the learners manage to communicate when they have limited command of language. Regarding this concept of communicative strategies, some scholars attempted to define it from different angles. The idea of error is a motivation for some scholars to define this notion. Selinker (1972) introduced the term communicative strategy, as one of the five processes in the learner's latent psychological structure that is central to language learning (i.e. language transfer, transfer of training, strategies of second language learning, strategies of second language communication and overgeneralization of linguistic materials). He was mainly interested in accounting for certain classes of errors which are fossilized in terms of in these five processes involved in the development of interlanguage.

Another definition is presented by Corder (1985) who tries to relate communication strategy as concerned with "the relationship between means and ends". However, language learners may take recourse to communicative strategies when there is not a balance between means and ends. Faerch and Kasper (1983) viewed communicative strategies from another angle, which is a psycholinguistic one. They regarded them as language learning processes. Faerch and Kasper believed that these plans are consciously designed by learners to solve a problem, which may cause an obstacle on the way of achieving a particular goal. There are two components of consciousness and *problem orientedness* present in this idea. The first criterion, *problematicity*, implies that these strategies are employed only when a speaker perceives that there is a problem which may interrupt communication. Second criterion, called consciousness states that they are always consciously employed.

These different views concerning communicative strategies have three characteristics in common. The following criteria show these common features:

1. A speaker wishes to communicate meaning x to a listener.
2. The speaker believes the linguistic or sociolinguistic structure most wanted to convey meaning x is unavailable, or is not shared with the listener.
3. The speaker chooses to:
 - a) Avoid- not attempt to communicate x; or,
 - b) Attempt alternative devices to communicate meaning (Tarone, 1981).

As the above features display, communication will be underway when someone has something to communicate. He/She uses communication strategies as devices to recompense for some shortcoming which may cause an interruption in the communication. Communicative strategies as a component of communicative competence are assumed to be helpful in enabling learners to function in the real world situations efficiently. The studies and experiments about communicative strategies have mostly centered on the relationship between proficiency level and communicative strategies. (e.g. Bialystok & Froehlich, 1980; Paribakht, 1985; Poulisse, 1987; Si-Quing, 1990). Mansouri (1997), for instance, investigated the linkage between the proficiency level of the learners of English and various types of communication strategies they employ to convey the messages.

The result of this experiment study showed that achievement strategies are more frequently adopted by high –proficiency group and reduction strategies are more frequently adopted by low –proficiency group.

Several studies have focused on investigating the choice and execution of CSs. such studies differ substantially in the methods of data gathering, kinds of analyses, sorts of learners and the language concerned. Lots of the experimental studies of CSs have concentrated on the process of strategy selection, in addition to the efficacy of the CSs chosen. Just a few restricted studies have focused on the factors that influence the choice and use of CSs. a number of such studies investigated the interactional approach; others are concerned with psycholinguistic approach.

One study conducted by Tarone and Yule (1987) investigated the nature of spoken English used when non-native speakers are in interaction with other non-native speakers,. The East was represented by native speakers of Chinese, Japanese, and Korean; the West was represented by native speakers of Spanish from different South American countries. The study concentrated on particular communication strategies. No socio-cultural variables were involved in communication. The circumstances were designed to draw out transactional instead of interactional communication. Speakers were supplied with a prearranged quantity of information to express their meaning while both sides were conscious that information gap exists. The spoken data drawn out under these circumstances included several CSs. “Repetition”, “explication” and “overelaborations” were strategies reported in this study. The study also showed that “topic avoidance” and “message abandonment” were comparatively uncommon. Moreover, the study disclosed that “literal translation” was exceptional and the strategies of “language switch” and “appeal to authority” were not reported in any way. Tarone and Yule suggested that the non-native to non-native communicative conditions restrain the employment of such strategies.

Methodology

Participants

The participants for the present study were chosen from among 105 EFL male and female learners. They were alike regarding their educational background, family and social status, studying English at the intermediate level in an English institute in Babol. Their age range was from 16 to 22. Most of the subjects were high school students, and few of them were freshmen at university. To determine their proficiency level, a Nelson proficiency test was run. Based on the results of Nelson test, 60 subjects were selected and divided into two equal groups of control and experimental ones.

Materials and Instruments

The following instruments were used in this study:

1. Homogeneity Test

To ensure the homogeneity of the subjects, a Nelson 150D English proficiency test was administered. It contained 50 multiple choice items on knowledge of English structures. The time allocated to this test was 25 minutes and the scoring was estimated out of 50.

2. Critical Thinking Test

To measure the subjects’ critical thinking abilities, the critical thinking appraisal test (CTA) was administered. It contained 30 items as pre-test and post-test both before the treatment to measure their critical thinking ability, and after the treatment to measure any changes in subjects' critical thinking ability.

Treatment mainly focused on debate. The reliability measured through Cronbach Alpha was .91. The CTA included a 5-point scale ranging from always to never. Therefore, the scores ranged within 30 to 150.

3. Materials for Debate

It is strongly supported that debate is the best method to acquire and implement the principles of critical thinking (Freely, 2000). To achieve this purpose, 10 greatly controversial topics were selected by the researchers. The topics had informal and controversial styles, taken from the books *Mosaic 1* for reading by Wegmann and Knezevic (2002), *For and Against* by Alexander (1973), and *concepts and comments* by Patricia Ackert and Linda Lee (2000), according to the students' interest. Then, they were simplified and revised using the internet sites to be appropriate for the intermediate EFL students. The justification behind the selection of these themes was that debatable topics are extremely controversial. If there is agreement on the topic, there would be no arguments, hence, no debate.

4. Writing a narration and translation

To elicit communicative strategies, the researchers asked the subjects to perform two types of tasks: writing a narration based on a series of related pictures, and translation. The rationale behind requiring the subjects to perform these tasks was based upon three chief considerations. First, the tasks involved the learners in conveying meaning. Second, the tasks neither encouraged nor hampered the employment of certain communication strategies. Finally, they provided evidence for the researchers that communication strategies had consciously been employed by the subjects in their attempt to solve one or the other communication trouble. The reason that a picture story (rather than isolated pictures) were chosen was that through a picture story one had to talk about the main concepts and characters. In this way, the problem of excessive avoidance was eliminated.

Procedures

To conduct this study, a comparison group design that is representative of experimental studies was implemented. Actually, critical thinking development in students, developed through debate, was used as the independent variable (treatment). To ensure the homogeneity of the participants in terms of language proficiency, the standard Nelson 150D test was run at the outset of the study to 105 students. Sixty homogeneous subjects selected through this test were equally divided into treatment and control groups (n=30). They were given a critical thinking appraisal test to check their critical thinking ability before the treatment. After the treatment the same test was administered to determine probable changes in the experimental group. In a subsequent procedure, the researchers wanted to determine the employed communicative strategies through a) writing and describing a picture story in English and b) translating the very English story into Persian. In fact, the subjects of these two classes were required to write a story in English in accordance with a series of connected pictures within a limited period of time. Upon writing the story in English, they were instructed to describe the same story in Persian, the subjects' native language. At the same time they were specifically instructed to write a composition in Persian about what they thought to be necessary to be written regardless of what they had written in their English version. Actually, the researchers chose to gather data both in English and Persian because the English version reflected the actual interlanguage forms produced by the subjects and the native language versions were assumed to reflect the learners' intended or optimal meaning and therefore, any disparity between the two could be ascribed to the selection of one or another communicative strategies employed as a result of inadequate competence in English.

Later, the subjects were required to translate their Persian version of the story into English. The aim was to eliminate any imprecision caused by the learners' possible modification in the Persian version after writing the English version, for they might have found it boring to tell the same story twice, or they might have noticed some additional details of which they would have been unaware when producing the first version .

Treatment

After the pretest, 15 simplified topics were given to the treatment group from which to choose 10 based on their interest, since according to Halvorsen et al. (2005), choosing topics appropriate to the interests of the students is essential. The chosen topics were later given to the students, one per week. The researchers pursued the steps suggested by Halvorsen (2005) to hold the debate in the classroom. The first step was introducing the topics to the students and offering them to take the topics home for research and collecting pertinent data about them. It is extensively believed that having knowledge about an arguable topic is the vital precondition for holding a debate. As Willingham (2007) asserts, research of cognitive science indicates that the process of thinking is interlinked with the field knowledge. Accordingly, it was constantly emphasized that they had to supply themselves with pertinent knowledge from the internet, books, magazines, newspapers, and afterward share the gathered information with their parents, teachers, and friends, to assess the facts on them. Then, they were required to attend the class with a list of pros and cons of the issue. In the following step, the students were divided into small groups to exchange their ideas and think about the possible arguments that might occur. Through this process students were led to cooperation which could enhance their critical thinking. Then, the participants in debates were divided into two groups of supporters and opposers. One student first would introduce the topic obviously and describe the concepts precisely to eliminate any misapprehension about the exact meaning of the words. Based on Djuranovic (2003), it is necessary to define the terms in debate since they determine the topic of the debate and its constraints. In the next pace, the debate would occur and the participants would offer their ideas by means of argument. Having shared the opinions, the instructor would summarize the debate with stating an outline of the students' opinions and views, judging the strong points and flaws and letting the students state their opinions. This phase is imperative because it helps the students to recognize that the process of thinking and debate can result in a real consequence (Halvorsen, 2005). After each gathering the students were to present a piece of writing on the general conclusions of the class and their final view of the subject. At the end of the debate they received scores based on the worth of their analysis. It is to be noted that in the debate session, the instructor attempted to teach the students how to differentiate between facts and judgments or opinions and how to prove their claims through examples, statistics, and specialist opinions. They actually learned to begin the argument with 'I think/believe that ... because ... therefore ...' (Krieger, 2005). In the control group, they did not receive any special feedback in their writing task.

Finally, the appraisal critical thinking test employed at the pre-test was run again for both groups to discover the discrepancies between them and to investigate the possible positive consequence of debate on their critical thinking ability.

Data analysis and results

The present study followed both descriptive and inferential statistics. The descriptive statistics was concerned with computing mean and standard deviation of the scores on the piloted test to homogenize participants.

Cronbach Alpha was used to estimate the inter-rater reliability of the test. The appraisal critical thinking test was run both at the pre-test and posttest stages to find out the likely positive outcome of debate on the students' critical thinking ability. Also, t-tests were administered to compare the two groups at the post-treatment stage regarding their employment of communicative strategies. The following descriptive statistics show the difference between control and treatment groups:

Table 1, The Results of the Participants' Pre-Test and Post-Test Scores in the control group
Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|---|---------|---------|---------|----------------|
| pretest | 5 | 30.00 | 60.00 | 48.0000 | 16.43168 |
| posttest | 5 | 30.00 | 60.00 | 42.0000 | 16.43168 |
| Valid N (listwise) | 5 | | | | |

The findings on the mean don't exhibit a significant difference between pretest and posttest scores in the control group, i.e. the mean for pretest was 48.0000 which in comparison with the mean for posttest (42.0000) is not significant. In the same line, an ANOVA was run to make certain whether there is a significant difference in their performance i.e. the existence of critical thinking in the control group.

Table 2, the results of ANOVA on the participants' pretest and posttest scores in the control group
Control group tests of between-subjects effects

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|-------|------|
| Corrected Model | 145.200 ^a | 1 | 145.200 | .069 | .810 |
| Intercept | 3169.714 | 1 | 3169.714 | 1.508 | .307 |
| Pretest | 145.200 | 1 | 145.200 | .069 | .810 |
| Error | 6306.000 | 3 | 2102.000 | | |
| Total | 29844.000 | 5 | | | |
| Corrected Total | 6451.200 | 4 | | | |

a. R Squared = .023 (Adjusted R Squared = -.303)

As the above table shows, F for pretest is less than one (.096). It exhibits that there is no significant difference between pretest and posttest regarding critical thinking. In other words, the critical thinking ability in the control group did not change.

Table 3, the results of the participants' pretest and posttest scores in the treatment group

| Descriptive Statistics | | | | | |
|------------------------|---|---------|---------|---------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| Pretest | 5 | 30.00 | 60.00 | 48.0000 | 16.43168 |
| Posttest | 5 | 60.00 | 120.00 | 90.0000 | 21.21320 |
| Valid N (listwise) | 5 | | | | |

As the mean indicates, there is a significant difference between pretest and posttest means, expressing the effect of treatment on the treatment group.

Table 4, The results of ANOVA on the participants' pretest and posttest scores in the treatment group

Treatment group tests of between-subjects effects

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|-------|------|
| Corrected Model | 270.000 ^a | 1 | 270.000 | 1.800 | .272 |
| Intercept | 385.714 | 1 | 385.714 | 2.571 | .207 |
| Pretest | 270.000 | 1 | 270.000 | 1.800 | .272 |
| Error | 450.000 | 3 | 150.000 | | |
| Total | 15300.000 | 5 | | | |
| Corrected Total | 720.000 | 4 | | | |

R Squared = .375 (Adjusted R Squared = .167)

As it is observed in the above table, F for or pretest (1.800) is greater than one. It shows that learners in the treatment group were oriented toward critical thinking.

Table 5, The results of descriptive statistics on the use of achievement communicative strategies between the two groups

Group Statistics

| | Critical | N | Mean | Std. Deviation | Std. Error Mean |
|------------|----------------|----|--------|----------------|-----------------|
| Strategies | reduction high | 30 | 3.5000 | 1.50287 | .27439 |
| | 2 | 30 | 2.2000 | 1.12648 | .20567 |

Table 5 above exhibits the difference concerning the mean of the two groups. To understand the significance of this difference, an Independent Samples *t*-test was run. The findings are shown in the following table.

Table 6. The results of Independent Sample *t*-test on the use of achievement communicative strategies between the two groups

Independent Samples Test

| | |
|---|------------------------------|
| Levene's Test for Equality of Variances | t-test for Equality of Means |
|---|------------------------------|

| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
|------------|-----------------------------|-------|------|-------|--------|-----------------|-----------------|-----------------------|---|---------|
| | | | | | | | | | Lower | Upper |
| strategies | Equal variances assumed | 6.063 | .017 | 3.791 | 58 | .000 | 1.30000 | .34291 | .61359 | 1.98641 |
| | Equal variances not assumed | | | 3.791 | 53.768 | .000 | 1.30000 | .34291 | .61244 | 1.98756 |

As seen the above table, the observed t (3.791) is greater than critical t (2.94), which is expressive of a significant difference between the groups with respect to the use of achievement communicative strategies.

Table 7, The results of descriptive statistics on the use of reduction communicative strategies

Group Statistics

| critical | N | Mean | Std. Deviation | Std. Error Mean |
|------------------------|----|--------|----------------|-----------------|
| reduction strategies 1 | 30 | 3.1333 | 1.52527 | .27847 |
| 2 | 30 | 3.0000 | 1.50860 | .27543 |

The above table shows that the mean of the two groups are different. To find out the significance of this difference, an Independent Samples t -test was run. The results are shown in the following table.

Table 8, The results of Independent Sample t -test on the use of reduction communicative strategies

The Independent Samples Test

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|------------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|--------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| strategies | Equal variances assumed | .152 | .698 | .340 | 58 | .735 | .13333 | .39168 | -.65069 | .91736 |
| | Equal variances not assumed | | | .340 | 57.993 | .735 | .13333 | .39168 | -.65069 | .91736 |

As the above table shows the observed t (.340) is less than critical t (2.94), that is not indicative of any significant difference between the two groups regarding the use of reduction communicative strategies.

Discussion and concluding remarks

Over the last decades a range of researchers became aware of the fact that the traditional approaches to teaching could not guarantee learners' maximum actual ability; as a result, they attempted to build up post-modernist approaches and techniques such as critical thinking (CT) to advance learning. Based on Condon and Kelly-Riley (2004), critical thinking is one of the outstanding methods, which leads learners to their utmost real language capability. So, this might

be regarded as one of the reasons for the efficiency of CT in employing communicative strategies.

The current study sought to investigate the effect of critical thinking on the employment of communicative strategies by learners. The main device to develop critical thinking skills was debate. According to Shufferman (1991), critical thinking could be labeled as 'how to think' efficiently about the topics. Teaching learners to think critically appears to be a major trouble in Iran's education system on account of the fact that teachers, routinely, endeavor to teach the content rather than the method. Freely (2000) strongly holds that debate is the most excellent method to obtain and put the principles of critical thinking into practice. To attain this goal, a set of highly controversial topics were chosen by the researchers. When the students were engaged in the process of debate, they got acquainted with both sides of the argument which then might have helped them in developing more convincing and reasoned arguments and counterarguments in comparison with the routine condition. This is in line with what Halvorsen (2005) states. He believes that debate compels students to think about the multiple dimensions of a matter, and it also makes them cooperate not just with the details of a particular topic, but also with one another.

Strategies of communication were first made by Selinker (1972) in his paper titled 'interlanguage' to give an explanation for certain classes of errors made by learners of a second language. These errors were regarded as a by-product of the attempt of learners to express his meaning in spur-of-the-moment speech with an adequate snatch of the target language system. It is fairly clear that all language users implement strategies to convey their meaning. A working definition of communicative strategies is that they are systematic techniques employed by a speaker to express his meaning when faced with some difficulty. The taxonomy for communicative strategies includes two major categories: achievement strategies and reduction ones.

The analysis of data regarding achievement strategies revealed that there was a significant difference between the numbers of achievement strategies employed by the two groups. Students in experimental group who had developed critical thinking through debate used achievement strategies more frequently than those in the control group who had not developed such sort of thinking. This seems to be due to the fact that subjects characterized by a strong critical thinking orientation are likely to engage in adaptive learning behaviors which include strategy shifting, increased effort, reanalyzing a problem, and a decision to persist in the face of difficulty (Meece & Holt, 1993). It also seems that in the critically-oriented group the subjects were involved in critical reflection on their own task to see how it required to be recovered on the basis of the required criteria. This self-reflection might have had a noteworthy role in upgrading the learners' use of achievement strategies.

Consequently, the critically-oriented group might have outperformed the control group regarding the use of achievement strategies as a consequence of the fact that this self-reflection cognitively involved them more, and gave them more responsibility for their own action. In contrast, subjects in the control group who have not developed a strong critical thinking are likely to engage in mal-adaptive learning behaviors including low task engagement, low persistence and the occasional adoption of a helpless response.

The analysis of data in relation to reduction strategies revealed that there was no significant difference between the two groups in terms of the number of reduction strategies employed by them. It seems to be owing to the fact that critically-oriented learners are more willing to use achievement strategies rather than reduction ones. However, the orientation toward self-competition and self-improvement, psychologically led these learners to adopt reduction strategies in order to avoid damaging their egos.

The results of the current study, in conjunction with those of the preceding studies, can help a range of professionals dealing with language teaching/learning including teachers, syllabus designers, material developers and curriculum developers. Additionally, language learners as another group concerned with language teaching/learning can also derive benefit from such strategies to learn more efficiently.

References

- Ackert, P. & Lee, L. (2000). *concepts and comments*. U.S.A.: Holt, Rinehart, & Winston, Inc.
- Alexander, L.G. (1973). *For and Against*. UK: Longman Group Ltd.
- Bialystok, E., & Frohlich, M. (1980). Communication strategies for lexical difficulties. *Interlanguage Studies Bulletin*, 5 (1), 3-30.
- Condon, W., & Kelly-Riley, D. (2004). Assessing and teaching what we value: The relationship between college-level writing and critical thinking abilities. *Assessing Writing*, 9(1), 56-75.
- Corder, P. (1981). *Error analysis and interlanguage*. UK: Oxford University Press.
- Corder, S.P. (1983). Strategies of Communication. In C. Faerch & G. Kasper (Eds), *Strategies in Interlanguage Communication*. London: Longman.
- Djuranovic, M. (2003). The Ultimate Lincoln- Douglas Debate Handbook. Retrieved Sep 16, 2008 from www.iddebate.net/thirdedition.pdf.
- Facione, P. A., (1992). Critical Thinking: What it is and why it counts. Retrieved March 1, 2008, from <http://insightassessment.com/t.html>
- Faerch, C., & Kasper, G. (1972). Interlanguage. *IRAL*, 10(3), 209-231.
- G. (1983). Plans and Strategies in Foreign Language Communication. In Faerch & Kasper (Eds.), *Strategies in Interlanguage Communication* (pp. 20-60). London: Longman.
- Halvorsen, A. (2005). Incorporating critical thinking skills development into ESL/EFL courses. *Internet TESL Journal*, 11(3). Retrieved September 14, 2008, from <http://iteslj.org/Techniques/HalvorsenCriticalThinking.html>
- Kabilan, M. K. (2000). Creative and critical thinking in language classroom. *The Internet TESL Journal* 6(6). Retrieved September 14, 2008, from [http://iteslj.org/Techniques/Mansouri,M.\(1997\)theeffectofthelevelofproficiencyoncommunicationstrategies.M.A.Thesis.IslamicAzadUniversity](http://iteslj.org/Techniques/Mansouri,M.(1997)theeffectofthelevelofproficiencyoncommunicationstrategies.M.A.Thesis.IslamicAzadUniversity).
- Krieger, D. (2005). Teaching debate to ESL students: A six – Class Unit. *The Internet TESL Journal*, 11(2). Retrieved September 14, 2008, from <http://iteslj.org/Techniques/>
- Meece, J. L., & Holt, K. (1993). A pattern analysis of students' achievement goals. *Journal of Educational Psychology*, 4, 582–590.
- Paribakht, T. (1985). Strategic competence and language proficiency. *Applied Linguistics*, 6(2): 132-146
- Paul, R. (1990). Critical Thinking: What every person needs to survive in a rapidly changing world. Rohnert Park. CA: Center for critical thinking and moral critique.
- Paul, R. (2004). The state of critical thinking today: the need for a substantive concept of critical thinking. Retrieved July 15, 2009 from www.criticalthinking.org
- Poulisse, N. (1987). Problems and solutions in the classification of compensatory strategies. *Second Language Research*, 3, 141–153
- Reed, J. H. (1998). *Effect of a model for critical thinking on students' achievement in primary source document analysis*. (a PhD dissertation) University of south Florida. Retrieved March 28, 2008 from www.criticalthinking.org
- Schafersman, S. D. (1991). An introduction to critical thinking. Retrieved March 3, 2008 from www.freeinquiry.com/critical.html

Selinker, L. (1972). Interlanguage. *IRAL*, 10 (3), 219-231.

Si-Qing, C. (1990). A study of communication strategies in interlanguage. Production by Chinese EFL Learners. *Language Learning*, 40.2: 155-87.

Tarone, E. (1981). Some Thoughts on the Notion of Communication Strategy. *TESOL Quarterly*, 15, 285-295

Tarone, E., & Yule, G. (1987). In L. Smith (Ed.), *Communication Strategies in East-West Interactions*.

Wegmann, B., & Knezevic, M. (2002). *Mosaic 1 Reading*. (4th ed.). NY: McGraw - Hill Companies, Inc.

Willingham, D. T. (2007). Critical thinking: why is it so hard to teach? *American Educator*, 33(2), 8-19.

Wright, I. (2002). *Is that right Critical Thinking and the social world of the young learner?* Toronto: Pippin Publishing Corporation.