

The Impact of the Six Thinking Hats as a Teaching Technique on EFL College Students' Performance in Composition Writing

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ABSTRACT

Edward de Bono's Six Thinking Hats are real or metaphorical six different coloured hats, in which each colour represents a different type of thinking. The White Hat represents objective thinking ,i.e. it also concerns with information and facts. The Red Hat examines the given topic through emotions and feelings. The Black Hat denotes constructive criticism, and explores the negative aspects of the given topic. The Yellow Hat delineates the advantages of an issue and promotes problem solving skills. The Green Hat aims at exploring creative ways for overcoming the disadvantages or problems encountered or for taking an idea about new direction. Finally, the Blue Hat focuses on the

world of metacognition and reflection to be adopted and built strongly.

The problem investigated in this work is related to the fact that Iraqi EFL composition writing instructors emphasize the theoretical aspects of the textbooks, while, they give little attention to the practical aspects. As a result, there is a need to investigate new techniques to emphasize the practical aspect in teaching composition writing. Thus, this study is an attempt to find out the effect of the Six Thinking Hats technique on EFL college students' performance in composition writing.

To achieve the aim of the study, the following hypotheses have been tested:

1. There is no statistically significant difference between the experimental group performance and that of the control group in the composing component of the post test.
2. There is no statistically significant difference between the experimental group performance and that of the control group in the style component of the post test.
3. There is no statistically significant difference between the experimental group performance and that of the control group in the sentence formation component of the post test.

4. There is no statistically significant difference between the experimental group performance and that of the control group in the usage component of the post test.

5. There is no statistically significant difference between the experimental group performance and that of the control group in the mechanics component of the post test.

6. There is no statistically significant difference between the experimental group performance and that of the control group in the composite score of the post test.

Thus, an experiment is designed .Sixty students from the College of Education for Women have been randomly chosen (thirty students as an experimental group which are taught composition writing by the use of the Six Thinking Hats technique and thirty students as a control group which are taught composition writing according to the conventional ways) during the academic year 2010 -2011.

Meanwhile, the subjects of both groups are matched according to their age, level of parents' education and their scores in the pre-test. The researcher herself has taught both groups the assigned material (eight selective topics).

The validity of the topics, the test and the scoring scheme have been obtained by exposing them to jury members in the fields of ELT and linguistics. The answers of the test have been separately scored by the researcher and two other

scorers separately. The reliability of the test has been secured by using Alpha Cronbach Formula (0.813), intrascorer reliability (0.987), and interscorer reliability (0.953).

Statistical analysis of data achieved through the test indicates that there are statistically significant differences between the experimental group performance and that of the control group in terms of composing, style, sentence formation, usage, mechanics, and the composite score of the post test, in favour of the experimental group.

The researcher concludes that using the Six Thinking Hats Technique develops students' performance in composition writing and gives them opportunity to simplify their thinking process, explore facts, seek the negative and positive aspects in a given topic and make logical solutions and decisions.

In the light of these results, some recommendations and suggestions for further studies are presented.

CHAPTER ONE

Problem of the Study and its Significance

In recent decades, the teaching of writing has been the focus of considerable interest within both first and second language contexts. This has come in reaction to the scant attention it received for many years and the current growing concern for tackling problems experienced in communicating

within educational and wider social contexts. Writing is often of crucial importance as a gate-keeping activity: judgments on the performance of an individual may have consequences for the writer, such as exclusion from or successful entry into a specific discourse community, as well as being the means through which testing and assessment of learning regularly take place. (Johnson & Johnson, 1999:341).

Muschla (2011: 2) states that teaching writing provides ways for students to reflect their personal experiences that can be developed directly into a topic. Sometimes these experiences can be a spark, igniting the imagination to develop other ideas.

In order to learn from experiences, students need to bear in mind that different writing outcomes will result from different strategies selected, or from different models or frameworks used. Therefore, it is worth spending sometime considering the selection of the strategies students will use, as they are going to develop considerable time to writing reflectively and to produce tangible results (Jasper, 2006:90).

Jackson (2009:43) believes that writing can develop students' skills and capabilities across the whole curriculum; teachers will need to allow students frequent opportunities to discuss among themselves what ideas mean and how these ideas can be applied in their writing.

In a socio-constructivist view, according to Hidi & Bosocolo (2007:9), writing is a process of construction of meaning. The main instructional condition that should be respected in order to help students consider writing as a meaningful activity, and make them feel motivated to write regards to overcome the traditional isolation of academic writing, and link it closely to other classroom activities. By practicing in classroom activities, a student learns the functions of reading, writing, and the other literate practices. Thus, writing is portrayed as a multi-disciplinary activity.

Crawford & Ladd (2002: 3) believe that “Idea development is the substance of a piece of writing. Without it, writing is superficial and insignificant-full of generalities, unsubstantiated claims, and empty verbiage- a waste of a reader’s time”

Caswell & Mahler (2004:3) describe writing as a vehicle for communication and a skill mandated in all aspects of life. No matter their age, students recognize the need to communicate in writing.

Teachers who create opportunities in their classrooms for students to write may be enhancing students’ awareness of the instrumental use that writing plays in society (Graham et al, 2007: 104).

Pratt (2011: 107) asserts that both social constructionism and critical approaches are potentially helpful in adding another dimension to the in-depth inquiry by representing academic writing.

Baines (2008: 43) assures that writing is multi-sensory: all of the senses-sight, hearing, and touch contribute as ideas are generated and refined into written work.

In college, one important outcome of improved writing is students' ability to develop sound critical habits, sharpen their reasoning skills, and distinguish inductive from deductive logic (Vandermeij et al, 2009: 18).

There are many studies that have been carried out to tackle students' weaknesses in writing through studying students' written performance. All of these studies have found out that students cannot formulate personal views during the classroom discussion. This may be attributed to the methods and techniques used by instructors of composition writing. Using traditional methods and techniques in teaching composition may have an effect on the failure of improving writing (Al- Khafaji 2005, Al- Temimi 2005 , Esa 2009,Hussein 2010).

Manktelow (2005:88) believes that the Six Thinking Hats (STH) technique is an important and a powerful technique used to look at decisions from a number

of important aspects which forces one to move outside his habitual thinking style .It helps students to react in difficult situations. The concreteness of the Hats helps them to identify their reactions to the situations, analyze them, and create real life changes. Conflict resolution and a more positive school climate result from student problem solving with the STH (de Bono, 1992:30).

The STH technique provides a common language that works in different cultures. It promotes collaborative thinking, sharpens focus, facilitates communication, reduces conflict, enables thorough evaluations, improves exploration, fosters creativity and innovation, saves time, and boosts productivity (Serrat, 2009:3).

De Bono (1990: 272) states that the STH technique is supposed to promote quality of thinking and communication for students, teachers, and educational leaders. He also believes that many successful people think from a very rational, positive viewpoint. People may fail to look at a problem from an emotional, intuitive, creative or negative viewpoint. This can mean that they underestimate public resistance to plans, fail to make creative leaps, and do not make essential contingency plans.

By this technique participants can consider the different points of view together at the same time, rather than

arguing about them. The STH technique also keeps group from deciding on one right answer or the rightness of one point of view without considering the many facts of the issue (de Bono, 2005: 87).

The STH technique can be applied to most topics, problems or activities. Students do not always have to use all the hats, and they do not have to do them in any particular order (Rebecca, 2009:56).

Consequently, the researcher herself believes that students should learn content while solving realistic problems. Learning in order to know should not be separated from learning in order to do. Thus, there is a need to design writing activities that are supported by instruction and modeling that include a collaborative , problem-solving and role playing elements, and that require both reflection and articulation of that reflection.

1.2 Aim

The present study aims at identifying the impact of the Six Thinking Hats as a teaching technique on EFL college students' performance in composition writing.

1.3 Hypotheses It is hypothesized that:

1. There is no statistically significant difference between the experimental group performance and that of the control group in the composing component of the post test.

2. There is no statistically significant difference between the experimental group performance and that of the control group in the style component of the post test.
3. There is no statistically significant difference between the experimental group performance and that of the control group in the sentence formation component of the post test.
4. There is no statistically significant difference between the experimental group performance and that of the control group in the usage component of the post test.
5. There is no statistically significant difference between the experimental group performance and that of the control group in the mechanics component of the post test.
6. There is no statistically significant difference between the experimental group performance and that of the control group in the composite score of the post test.

1.4 Value

The present study is intended to be valuable to:

1. the researchers and experts in ELT since it is an attempt to shed light on the impact of the (STH) technique in developing student's composition;
2. EFL instructors and students to try out recent techniques such as the STH technique in teaching and learning composition;

3. course and syllabus designers who have to consider the STH technique in writing when designing EFL course books.

1.5 Limits

The study is limited to:

1. second year EFL college students.
2. the practical phase of teaching composition writing.
3. the academic year 2010-2011.

1.6 Definitions of Basic Terms

1.6.1 Six Thinking Hats

Sarsani (2005: 189) defines STH as six modes of thinking and are directions to think rather than labels for thinking. That is, the hats are used proactively rather than reactively.

The STH, de Bono's Hats system, is a thinking tool for group discussion and individual thinking combined with the idea of parallel thinking. It provides a means for groups to think together more effectively and a means to plan thinking process in a detailed and cohesive way (Vacca, 2006:8).

The operational definition of STH is a teaching technique that comprises six coloured hats that represent ways of thinking which are used to develop EFL college students' performance in composition writing.

1.6.2. Technique

Cobuild (1987: 501) defines technique as a particular procedure of doing an activity, usually a procedure that involves practical skills.

A technique is an implementation which actually takes place in a classroom. It is a particular trick, stratagem, or contrivance used to accomplish an immediate objective (Richards & Rodgers, 2001:19).

The operational definition of technique is the systematic procedure by which the STH are applied.

1.6.3. Performance

Brown (2000: 30) refers to language performance as the overtly observable and concrete manifestation or realization of competence. It is the actual doing of something. Regarding writing performance, he referred to it as the actual production of linguistic events.

The operational definition of performance is the students' actual use and production of the following aspects in composition writing:

1. Composing: In which, the focus is on the central ideas with an organized and elaborated text.
2. Style: It refers to the way in which purposefully chosen vocabulary, sentence variety, information, and voice affect reader.

3. **Sentence Formation.** It refers to standard word order, no enjambment (run -on sentence), completeness (no sentence fragments), standard modifiers and coordinators, and effective transitions.
4. **Usage:** It refers to standard inflections (e.g. plurals, possessive, -ed, -ing with verbs, and -ly with adverbs), subject-verb agreement (we were vs. we was), standard word meaning.
5. **Mechanics:** It focuses on the effective use of capitalization, punctuation marks, spelling, and formatting.

1.6.4. Composition Writing

Composition writing is an acting task that walks students step-by- step through the creative process , revealing new ways of communicating with their inner self, and unlocking their imagination (Weiss,2006: 9).

Rubie-Davies (2011: 51) defines composition writing as a means by which students in educational settings present and display what they know. As students move through schooling, competence in using writing for this purpose assumes greater importance.

The operational definition is the written work produced to practise the skills and techniques of writing.

Chapter Two Theoretical Background and Related Previous Studies

2.1 The Structural Dimension of the Six Thinking Hats

Edward de Bono's STH is one of the best-known techniques for animating creative thinking in groups. The Six coloured hats correspond to different thinking styles or behaviours (Bilton & Cummings, 2010: 125). Each colour is printed separately, but in the end, they all come together. The hats are tools to help focus thinking and examine other points of view. They are physical symbols that trigger specific roles to play that enable students' thinking to break out of normal patterns. Putting on a hat is a deliberate process, because each hat activates a particular type of thinking (Jensen & Nickelsen, 2008).

The six hats, according to Sarsani (2005:188), represent six modes of thinking and are directions to think rather than labels for thinking. That is, the hats are used proactively rather than reactively.

Obviously, the benefits of de Bono's technique is that the individual or group will cover all the bases, or at least approach problems from various perspectives. De Bono does suggest that groups might agree on an agenda and a particular sequence of hats (Runco, 2007: 347). In addition, the STH

technique is a good way for fostering creativity to several forms of mind (Moon et al, 2011: 8).

However, the detailed analysis of these STH will reveal how these hats work individually as tools:

1 .The White Hat (Neutrality, Think about the facts)

White hat thinking is a way of asking for facts and figures to be put forth in a neutral manner. It encourages the thinker to separate what is fact and what is interpretation. The more information people have the better will their thinking be and the more appropriate their actions (de Bono, 2009: 66).

This hat is usually used at the beginning of a session as a background for the thinking that is going to take place. The white hat seeks out information that is missing and known. It deals with neutral fact and data finding which are reported objectively without interpretation (Gonzalez, 2001:27).

Four key white hat questions can guide one prior to making a judgment call:

1. What information do I have?
2. What information is missing?
3. What information do I need?
4. How do I get the information?

2. The Red Hat (Emotions, examine a topic through emotions and feelings)

Scannell & Burnett (2010: 29) define red hat as a colour of emotion and passion. Logic is not required.

Red hat thinking can praise or criticize an idea based on raw, subjective feelings (Macdonald, 2008: 176).

With the red hat people have to say how this proposal makes them feel emotional. For example, some might say they feel threatened or scared by this idea. Others might say they feel excited (Sloane, 2006:160).

Vialle et al (2005:150) see that thinkers are encouraged to contribute to the emotional aspects of the problem or idea under discussion.

De Bono (1999: 47) sets the purposes of the red hat as follows:

1. Intuition may be based on knowledge of the market, or past experience.
2. A hunch is a hypothesis based on intuition.
3. Decisions are not made solely on intuition, but red hat feelings do play an important part in many major decisions.
4. It legitimizes feelings as an important part of thinking.

5. It makes feelings visible so they become part of the thinking map and also part of the value system that chooses the route on the map.
6. It provides a convenient method for a thinker to switch in and out of the feeling mode in a way that is not normally possible without such a device.

The main key questions for red hat thinking are:

1. What emotions or feelings are involved in my thinking?
2. Should I include or exclude my emotions or feelings in making this call and to what extent should they play?
3. Am I passionate, fearful, or uncertain about this idea?
(Scannell & Burnett, 2010: 29).

3. The Black Hat (Critical, judgmental, think about the negative aspects of a topic)

The black hat is the cautious hat, judging the 'fit' of the facts, experience, system, law, policy, ethics. It denotes constructive criticism. This angle of thinking explores the problems with a topic or proposal; identifies flaws, risks and obstacles; and exercises judgment and caution (Vialle et al, 2005: 150).

The black hat is the hat of survival. Overuse of the black hat may lead to an unhealthy cynicism where people only seem to find fault with everything.

The key questions that play an important role in black hat thinking during problem solving are:

1. What are the risks?
2. What are the disadvantages or downsides of the idea discussed?
3. What words of wisdom might come from the idea discussed?
4. What are the difficulties found in the idea discussed?

(Scannell & Burnett, 2010: 29)

4. The Yellow Hat (Optimistic, think about the positive aspects of a topic)

The yellow hat, as explained by McGregor (2007: 141), focuses on identifying the values, advantages or benefits in something. It is the optimism hat. Everyone in turn has to say what is good about the proposal, or idea. Even if one thinks the idea does not work well, he has to find some redeeming qualities and good points about it (Sloane, 2006:161). People put on yellow hats to find ways to solve the problem; because they are optimistic. They are creative when they wear their yellow hats. Their thinking revolves around how it can be done to enjoy the benefits. Three key questions drive the yellow hat thinker:

1. Why not do this? It will work.

2. What great things will happen as a result?

3. Why is not everybody for this?

(Sweeney & Bourisaw, 1997: 38)

5. The Green Hat (Creativity, New ideas, Brainstorming, Prediction)

The Green hat stands for creative thinking .It is used to explore, investigate, decide, and, in so doing, give way to freewheeling thinking (Scannell & Burnett, 2010:27).Fisher (2005:79) asserts that creative thinking is about generating ideas and increasing the breadth of perception.

The green hat gives the go- ahead to generate alternatives and explore ideas. A green hat thinker would say, “We need to explore new possibilities” (Malone, 2003: 68).

According to Macdonald (2008: 176) this hat of thinking provides provocations, new ideas, and outrageous alternatives, with no effort to criticize or evaluate the merits of these ideas. One can use green hat thinking to shake things up and set off on a new direction.

This hat of thinking involves the cognitive processes of identification, clarification, generation of solutions, predicting consequences, evaluation of effectiveness of solutions (McGregor, 2007: 139).

It also stands for possibilities:

1. Could we do this in a different way?

2. How would we solve the problem?

3. Can we create other ways?

4. Are there any other additional alternatives?

(Lowgren & Stolterman, 2005: 98).

6. The Blue Hat: (reflect, think metacognitively, and try to grasp the big picture, summary of topic)

The Blue hat is the control hat, responsible for summaries, overviews, and conclusions. It focuses on thinking about the thinking needed to explore the subject. The Blue hat thinker organizes the thinking itself and calls for the use of other hats (de Bono, 1999:172). The blue hat can be used both at the beginning (for planning) and at the end (for summarizing) of each session for process control (McGregor, 2007:142) .

De Bono (2009:127) states that the thinker should certainly get into the habit of being able to look at his or her own thinking. He should be able to look back at the thinking he has used in performing a thinking task.

The blue hat is metacognitive, so it could be used after any other hat thinking. Four key questions drive the blue hat thinker:

1. What is the conclusion?

2. What is the best way to define the actual problem?

3. What are the desired outcomes of the solution-seeking process?

4. What is the most effective way of moving forward?

(McGregor, 2007:142).

2.2 Related Previous Studies

2.2.1 Sinclair, Tomlinson and Maskell (2005)

The study aims at identifying the impact of using the STH and Drama techniques on English as L1 intermediate school pupils' performance in writing.

The sample of this study is 15 schools for boys in Lancashire clustered into three groups in the north, south and east of the country.

To achieve the aim of the study, two procedures are followed .A programme of training is designed where both the STH and Drama techniques are used to include the fifteen schools. Seventy five questionnaires are given for pupils at the beginning and at the end of the programme to elicit the impact of using the two techniques proposed.

The results reveal that by using the STH and Drama techniques, there is a real impact on students' performance and a positive change in their attitudes towards writing.

2.2.2 Tooley (2009)

The study aims at evaluating the usefulness of using the visual images (the STH, and drawing techniques) in teaching English as L1 writing at the elementary stage.

The sample of the study includes only one elementary teacher and 24 pupils of both sexes used for in-depth study. The study is carried out in 2009 in Bowling Green, Kentucky.

To collect the required data, the researcher follows a case study approach including questionnaire responses, interviews, classroom observation and the analysis of students' writings.

The findings of the study indicate the impact of Drawing and the STH techniques on students' writing. In addition, the data reported highlights the use of the STH and Drawing techniques as instructional tools in writing instruction and support the conclusion that these techniques should be incorporated into the teaching of writing. Interestingly, students who are engaged in this study find these techniques useful since they provide opportunities for students to have fun, interact with others, discuss what they are doing, develop understanding through role play, and have clear target.

CHAPTER THREE

Procedures and Methodology

The Experimental Design

The experimental design represents the strategy which is set by the researcher to collect the necessary information and control the factors or variables which may affect this information and finally carrying out the suitable analysis to test the hypotheses of the research within a comprehensive plan. The researcher should choose the suitable experimental design which provides valid conclusions about the relationships between both independent and dependent variables (Brown and Rodgers, 2002: 210).

In order to achieve the aim of the study, the researcher has used “the pre- post test control group design”. This design takes the following form:

The Choice of the Test Material

The material of the composition test have been chosen according to the students' interest so as to ensure that mostly all students are motivated to take the test willingly and that even the weak students will have something to write. This is done by using an open questionnaire as shown in Appendix A.

Ten selected subjects have been exposed to the jury members to choose the three most suitable topics that can serve the aim of the study. The Jurors mostly agree on numbers 2, 8 and 9 to be the subjects of the pre-post test.

Equivalence of the Sample:

In order to increase the sensitivity of the experiment, the researcher has equated the subjects on the basis of four variables.

1. The age of the students.
2. The level of fathers' education.
3. The level of mothers' education.
4. The students' pre- test performance in composition writing.

Age of subjects

The researcher has used the *t*-test formula for two independent samples to determine whether there is any significant difference between the experimental group and the control group in the age factor measured in years.

The mean score of the experimental group is 20.83 and that of the control group is 21.33. The computed *t* - value is 0.576 while the table *t* - value is 2 under 58 degrees of freedom and at 0.05 level of significance. The comparison has indicated that there are no significant differences between the ages of the two groups.

Parents' Education

Fathers' Level of Education

In order to find out whether there is any significant difference between the two groups in the level of their fathers' education (see Appendix E), chi-square formula has been used.

The result shows that the value of the computed chi-square for the fathers' education is 4.873 which is less than the table value of chi-square (7.82) under 3 degrees of freedom and at 0.05 level of significance. This means that there is no statistically significant difference between the two groups in this variable.

Mothers' Level of Education

Both groups are found to be equal in this variable. The computed chi-square value is 2.064 which is less than the table value of chi-square (7.82) under 3 degrees of freedom and at 0.05 level of significance. This means that there is no statistically significant difference between the two groups in this variable.

The Students' Pre-Test Performance in Composition Writing

The t – test formula is also used to find out whether there is any statistically significant difference between the

scores of the experimental and control groups in the pre-tests.

CHAPTER FOUR : Results, Conclusions, Recommendations, and Suggestions for Further Studies

Results:

Comparison of the Experimental and the Control Groups in the Post-test Scores

In order to compare the experimental and control groups, the *t*- test for two independent samples is used.

Result Related to the First Hypothesis

The result reveals that the mean score of the experimental group is 3.43 and that of the control group is 1.80. The computed *t*- value 8.494 is higher than the table *t*-value (2) at 0.05 level of significance and under 58 degrees of freedom. This result shows that there is a statistically significant difference between the two groups in the composing component of the post test. That is, the experimental group is better than the control group; so the first hypothesis which indicates that there is no statistically significant difference between the experimental group performance and that of the control group in the composing component of the post test, is rejected.

Result Related to the First Hypothesis

The result reveals that the mean score of the experimental group is 3.43 and that of the control group is 1.80. The computed t - value 8.494 is higher than the table t - value (2) at 0.05 level of significance and under 58 degrees of freedom. This result shows that there is a statistically significant difference between the two groups in the composing component of the post test. That is, the experimental group is better than the control group; so the first hypothesis which indicates that there is no statistically significant difference between the experimental group performance and that of the control group in the composing component of the post test, is rejected.

Result Related to the Second Hypothesis

The result reveals that the mean score of the experimental group is 3.07 and that of the control group is 1.93. The computed t - value 4.943 is higher than the table t - value (2) at 0.05 level of significance and under 58 degrees of freedom. This result shows that there is a statistically significant difference between the two groups in the style component of the post test. That is, the experimental group is better than the control group; so the second hypothesis which indicates that there is no statistically significant difference

between the experimental group performance and that of the control group in the style component of the post test, is rejected.

Result Related to the Third Hypothesis

The result reveals that the mean score of the experimental group is 2.87 and that of the control group is 1.83. The computed t - value 4.614 is higher than the table t - value (2) at 0.05 level of significance and under 58 degrees of freedom. This result shows that there is a statistically significant difference between the two groups in the sentence formation component of the post test. That is, the experimental group is better than the control group; so the third hypothesis which indicates that there is no statistically significant difference between the experimental group performance and that of the control group in the sentence formation component of the post test, is rejected.

Result Related to the Fourth Hypothesis

The result reveals that the mean score of the experimental group is 2.70 and the mean score of the control group is 1.67. The computed t - value 5.869 is higher than the table t - value (2) at 0.05 level of significance and under 58 degrees of freedom. This result shows that there is a statistically significant difference between the two groups in the usage component of the post test. That is, the

experimental group is better than the control group; so the fourth hypothesis which indicates that there is no statistically significant difference between the experimental group performance and that of the control group in the usage component of the post test, is rejected.

Result Related to the Fifth Hypothesis

The result reveals that the mean score of the experimental group is 2.57 and the mean score of the control group is 1.57. The computed t - value 4.867 is higher than the table t - value (2) at 0.05 level of significance and under 58 degrees of freedom. This result shows that there is a statistically significant difference between the two groups in the mechanics component of the post test. That is, the experimental group is better than the control group; so the fifth hypothesis which indicates that there is no statistically significant difference between the experimental group performance and that of the control group in the mechanics component of the post test, is rejected.

Result Related to the Sixth Hypothesis

The result reveals that the mean score of the experimental group is 14.63 and the mean score of the control group is 8.80. The computed t - value 7.171 is higher than the table t - value (2) at 0.05 level of significance and under 58 degrees of freedom. This result shows that there is a statistical

significant difference between the two groups in the composite score of the post test. That is, the experimental group is better than the control group; so the sixth hypothesis which indicates that there is no statistically significant difference between the performance of the experimental group and that of the control group in the composite score of the post test, is rejected.

Conclusion

This study elucidates that the STH technique enhances students' writing performance. This technique produces positive effects on the students' performance in the writing lessons.

Apart from better composite scores, the students' compositions are of better quality in terms of composing, style, sentence formation, usage, and mechanics; the experimental group's students score significantly better than the control group students in their composition writing. When their writing is analyzed based on the compartmentalization of the five writing components (skills), it is undoubtedly obvious that students' show significant enhancement in all the five components of the writing skills. This indicates that the incorporation of the STH provides the mechanism in improving the students' writing performance through

improving the five writing skills which are also vital layers skills in language learning.

Thus, the benefits of the incorporation of the STH technique are twofold. Not only the students perform better in the composite score but at the same time they improve in the five components writing which are also important elements in language learning in general.

Recommendations

In the light of the results of the present study, the following recommendations are proposed:

1. Syllabus designers have to allocate time and give more emphasis to the practical aspect in teaching composition writing.
2. Departments of English in Iraqi Colleges are invited to adopt and develop modern techniques in teaching composition writing and other skills based on the level of language proficiency of their students.
3. Departments of English in Iraqi Colleges have to create writing labs and centers for students to strengthen the connections and interactions among different levels of oral and literate speech; pre-reflexive discourse, inner speech, analysis and evaluation that increase the creativity in writing and sophistication of language actual use beside the fun and playfulness.

4. Crucial interest should be given to the STH technique as it promotes beneficial and joyful learning and make students equal partners in the process of learning.
5. Classroom -size must be expanded in order to meet the needs of the large number of students and to fit the use of the STH technique.
6. Teaching thinking skills needs to be part of our educational system and special courses in the curriculum should be designed to teach thinking in writing and other skills.
7. Instructors in higher education have to consider how to incorporate learning how to learn skills such as critical thinking, problem-solving and teamwork in their students' learning activities.
8. Instructors have to support students' creative growth by teaching creativity as a process focusing on developing students' divergent thinking ability in composition writing and in any other skill.

Suggestions for Further Studies

Building on the present study, further studies are suggested to be conducted:

1. A study can be administered to investigate the effectiveness of the STH technique on different types of writing (diary, narration, etc.) at different levels of education.

2. A study can be conducted to investigate the similarities and differences between de Bono's STH, CoRT and DATT techniques in developing writing performance.
3. A study can be managed to find out similarities and differences between de Bono's STH technique and that of Gardner's multiple intelligence approach in developing writing or any other skills.
4. A study can be carried out about the six phases in de Bono's STH technique: Development and comparison with the six levels in Bloom's Taxonomy.

Bibliography

- Al-Temimi, S. H. (2005). "Self-Correction-and-Rewriting Technique: the Instructional Aspect of Composition Test". Unpublished PhD. Dissertation: College of Education/Ibn Rushd. University of Baghdad.
- Baines. (2008). *A Teacher's Guide to Multisensory Learning: Improving Literacy by Engaging*. Alexandria VA: ASCD publication.
- Brown, H.D. (2000). *Principles of Language Learning and Teaching* New York: Longman, Addison Westley Inc.
- Caswell, R. , and Mahler, B.(2004). *Strategies for Teaching Writing*. California: A SAGE Company.
- Crawford, Sh., and Ladd, L. (2002). *Teaching Idea Development: Standards- Based Critical Thinking Approach Writing*. California: Corwin Press, Inc.
- Cobuild, C. (1987). *English Language Dictionary*. London: William Collinssons and Co. Itd.
- De Bono, E. (1990). *I am Right-You Are Wrong. From This to the New Renaissance: From Rock Logic to Water Logic*. London: Penguin Books.

- _____. (1999). *Edward de Bono: Six Thinking Hats*.
England: Clays Ltd, St Ives pIc.
- _____. (2005). *De Bono's Thinking Course*. New York:
Barnes and Noble.
- _____. (2009). *Edward de Bono's Thinking Course:
Powerful Tools to Transform Your Thinking*.
London: British Broadcasting Corporation.
- Fisher, R. (2005). *Teaching Children to Learn*. Cheltenham:
Stonley Thornes Ltd.
- Graham, S., MacArthur, Ch.A, and Fitzgerald, J. (2007). *Best
Practices in Writing Instruction*. New York:
The Guilford Press.
- Gonzalez, D. (2001). *The Art of Solving Problems:
Comparing the Similarities and Differences
Between Creative Problem Solving, Lateral
Thinking and Synectics*. New York:
International Center for Studies in Creativity.
- Hidi, S. , and Bosocolo, P. (2007). *Writing and Motivation*.
Oxford: Elsevier Ltd.
- Isaken, S. G., Selby; E. C.; Treffinger, D. J., and Powers, S.
(1993). "Use of the Kirton Adaption-
Innovation Inventory with Middle School
Students". *The Journal of Creative
Behaviour*, 27(3).

- Jackson, R.R. (2009). *Never Work Harder Than Your Students and Other Principles of Great Teaching*. Alexandria: ASCD Publications.
- Jasper, M.(2006). *Professional Development, Reflection and Decision-Making*. Oxford: Blackwell Publishing Ltd.
- Jensen, E. Nickelsen, L. (2008). *Deeper Learning: 7 Powerful Strategies for in-Depth and Longer-Lasting Learning*. Thousand Oaks, CA: Corwin Press.
- Johnson, K., and Johnson. (1999). *Encyclopedic Dictionary of Applied Linguistics*. Oxford: Blackwell Publishers.
- Macdonald, M. (2008). *Your Brain: The Missing Manual*. Canada: O'Reilly Meadia, Inc.
- Malone, S. M. (2003). *Learning about Learning: An A-Z Training and Developing Tools and Techniques*. Great Britain: Cromwell Press, Trowbridge, Wiltshire.
- Manktelow, J. (2005). *Mind Tools: Essential Skills for an Excellent Career*. Victoria: Department of Education and Early Childhood Department.
- McGregor, D. (2007). *Developing Thinking: Developing Learning: A Guide to Thinking Skills*.

London: Library of Congress cataloguing-in-Publication Data CIP data.

- Moon, B., Hoffman,R.R., and Canas,A.(2011). *Applied Concept Mapping: Capturing, Analyzing, and Organizing Knowledge*. Boca Raton, FL: CRC Press.
- Muschla, R. (2011).*Perfect Mastering Writing*. New York: Mc Graw-Hill. Pratt, D. (2011). *Modeling Written Communication*. New York: Springer Dordrecht Heidelberg.
- Rebecca, L.R. (2009). *A Parent's Guide to Scholarship Test*. Australia: Ligare Pty Ltd.
- Richards,J.C. and Rodgers, T.S. (2001). *Approaches and Methods in Language Teaching* .New York: Cambridge University Press.
- Rubie-Davies, Ch.(2011). *Educational Psychology: Concepts, Research and Challenges*. London: Routledge.
- Runco, M. (2007). *Creativity: Theories and Themes: Research, Development, and Practice*. New York: Elsevier Academic Press.
- Sarsani, M. R. (2005). *Creativity in Education*. New Delhi: UGC.
- Scannell, E. E., and Burnett, C. (2010). *The Big Book of Brain-Building Games: Fun Activities to*

Stimulate the Brain. New York: McGraw-Hill.

Serrat, Q. (2009). ***Wearing Six Thinking Hats.*** Philippines: Knowledge Solutions.

Sinclair, S., Tomlinson, N., Maskell, E. (2005). ***A Lancashire Project to Develop Boys' Writing Through Visual Literacy and Drama.*** North West of England: Lancashire County Council.

Sloane, P. (2006). ***The Leader's Guide to Lateral Thinking Skills: Unlocking the Creativity and Innovation in You and Your Team.*** London: MPG Books Ltd, Bodmin, Cornwall.

Sweeney, J. and Bourisaw, D. (1997) ***Judgment.*** Larchmont: Eye on Education, Inc.

Tooley, S.H.(2009). ***The Art in Teaching Writing.*** Kentucky: Westren Kentucky University.

Vacca, J.A. (2006). ***Reading and Learning to Read.*** Boston: Pearson Education, Inc.

Vanderney, R.,; Meyer, V.; Rys, J.V.; and Sebranek, P. (2009). ***The College Writer: A Guide to Thinking, Writing, and Researching.*** Boston: Wadsworth.

Vialle, W.; Lysaght, P.; and Verenikina, I. (2005).
Psychology for Educators. Australia: Social
Science Press.

Weiss, B.J. (2006). *Writing is Acting* .Oxford: Heinemann
Educational Publisher.

عيسى، عمار جبار. (). " استراتيجيات القبايات الست في الاداء التعبيري
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ماجستير (غير منشورة) جامعة بغداد-كلية التربية-ابن

Asst.Prof.Shaimaa' Abdulbaqi Al-Bakri, Ph.D./Researcher: Khansa' Hassan Hussein Al-Bahadli
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