Towards a Critical Thinking Classroom

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Abstract
The major objective of the present study is to investigate the effectiveness of using Richard Paul's "Elements and Standards of Reasoning (E&Ss)" on improving the Critical Thinking skills as well as writing skills of EFL Saudi students. Students were identified as high, mid and low-level students. The progress of each group was measured through a progressive series of rubric assessments of their writing, examining five key areas important in rhetorical composition: clarity of writing, analysis of author's argument, use of supporting information, organization, and grammar and syntax. Through the introduction of this focused Critical Thinking training, student composition improved in all of the five key areas, among all the groups.
Keywords: critical thinking, writing skills, critical thinkers, passive learners, standards of reasoning

1. Introduction

Critical thinking, reading, and writing are among the most important skills necessary for succeeding in college. Teachers may assume that their students already have mastered basic academic skills. Now they will expect them to take more responsibility for in depth learning by reading and evaluating information then writing their conclusions and opinions in a formal, organized style. These skills can be improved by using specific metacognitive strategies at each stage of the process of learning.

Thinking is a natural process, but left to itself, it is often biased, distorted, partial, uninformed, and potentially prejudiced; excellence in thought must be cultivated (Scriven and Paul, 2004). John Dewey (1933) pointed out that learning to think is the central purpose of education. To some scholars, including Michael Scriven, "training in Critical Thinking should be the primary task of education" (1985).

The world is swiftly changing and with each day the pace quickens. The pressure to respond intensifies. New global realities are rapidly working their way into the deepest structures of our lives: economic, social, environmental realities – realities with profound implications for teaching and learning, business and politics, for human rights and human conflicts. These realities are becoming increasingly complex; and they all turn on the powerful dynamic of accelerating change. This is a new world for us to explore, one in which the power of Critical Thinking to turn back on itself in continual cycles and re-cycles of self-critique is crucial. (Paul, 1981).

1.2.1 Background of the Problem

Students do not have the critical skills necessary to compete is not in itself a crippling predicament— were the conditions right, the problem could be easily and quickly remedied. However the lack of Critical Thinking in students is an *institutional* problem, reflected in the attitudes and policies of educators.

Teachers believe they are already teaching critical skills, and students believe they are already learning critical skills, and both groups are resistant to change (Durr, Lahart & Maas, 1999). So whether we consider the future of our students in an international or domestic context, we cannot avoid the conclusion that there is a problem: students are not learning the critical skills they need, and teachers are resistant to learning and teaching them. If we are to avoid economic disaster at both the individual and national levels, we need to start training our students to think critically; and we simply don't have the time for bureaucrats to make the necessary changes that will affect our kids, and their kids' kids, *et al*. The teachers who have the ability need to start incorporating CT training in their lessons *now*, while their districts catch up.

Writing skills are often overlooked in EFL education. Through teaching EFL and ESP classes the researcher has observed that most students have difficulties in learning English specially writing. Students are all the time acting as passive learners. They lack the Critical Thinking skills required to allow them to learn and react critically to what they have learnt.

1.3 Purpose of the Study

This study will research the effect of focused Critical Thinking training on the composition skills of EFL learners, specifically through educational techniques developed and advocated by Richard Paul—his "Elements and Standards of Critical Thinking" (E&S's).

The purpose of this study is to demonstrate that Paul's techniques can be effectively taught to and used by EFL students of diverse skills and language abilities to improve their Critical Thinking and writing skills as measured in five areas:

1. Clarity of Writing
2. Analysis of author's argument
3. Use of supporting information
4. Organization
5. Grammar and Syntax

The target audience of this study is senior EFL learners, who can incorporate Critical Thinking methods into their learning.

1.4 Importance of the Study

It would be difficult to underestimate the importance of this study. As Richard Paul states, the fundamental characteristic of the twenty-first century is ever-accelerating change: A world in which information is multiplying even as it is swiftly becoming obsolete and out of date, a world in which ideas are continually restructured, retested, and rethought, where one cannot survive with simply one way of thinking, where one must continually adapt one's thinking to the thinking of others, where one must respect the need for accuracy and precision and meticulousness, a world in which job skills must continually be upgraded and perfected — even transformed (1995).

This modern dynamic is unique in human history, and our present national approach to education is simply not well-adapted to equipping students with the skills necessary to thrive in the emerging world. If we, as a nation, hope to maintain our present position of economic and cultural prestige, we need to act sharply and decisively; and if we as individuals hope to survive *in* it, we must direct ourselves to act the same way on a personal level. This study will demonstrate how we can *immediately* do that at the classroom level.

Moreover, while Critical Thinking is an ancient practice, its exercise has long been reserved for the elite. That needs to change. Critical Thinking is the instrument of social change, and it is imperative that it gets into the hands (and minds) of those who most desperately need change; of those who will be most affected by this changing world.

1.5 Hypotheses of the Study

The research hypotheses are:

1. There is a measurable effect of incorporating Richard Paul's Elements and Standards of Reasoning (E&S's) on improving senior level EFL students' Critical Thinking skills.
2. Students improve and continue to improve in their Critical Thinking as well as their writing skills.

Using Richard Paul's E&S's allows students to show improvement in clarity of writing, level of analysis, use of supporting information, organization of ideas, and accuracy of grammar and syntax

2. Literature Review

2.1 What is Critical Thinking

Effectively, the history of Critical Thinking begins in Athens circa 430 B.C. when Socrates, opposed by the intellectually shrewd but arrogant Sophists, introduced a method of

inquiry in which he examined his antagonists with probing questions designed to challenge their epistemological foundations. What he revealed was that most of what we knew—or rather *believed* we knew—had no basis more reliable than hearsay, speculation and assumption. Unfortunately, not much has changed in the 2,500 years since Socrates' death.

Long after the Greeks, Critical Thinking remained on the minds of Western philosophers. Scholastic, Renaissance and Enlightenment thinkers, such as Thomas Aquinas, Francis Bacon and Immanuel Kant dedicated themselves to the pursuit of true, defensible knowledge. By cutting through the jungle of assumptions that choke intellectual progress, these men followed the tradition pioneered by Socrates, devoting themselves to methodically reconsidering common beliefs and explanations, sifting them through the lens of reason in order to distinguish between those that were well-established in logic, and those which lacked an evidentiary foundation.

When examining the vast literature on Critical Thinking, various definitions of Critical Thinking emerge. Here are some samples:

"Critical Thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action" (Scriven, 1996).

"Most formal definitions characterize Critical Thinking as the intentional application of rational, higher order thinking skills, such as analysis, synthesis, problem recognition and problem solving, inference, and evaluation" (Angelo, 1995, p. 6).

"Critical Thinking is thinking that assesses itself" (Center for Critical Thinking, 1996b).

"Critical Thinking is the ability to think about one's thinking in such a way as 1. To recognize its strengths and weaknesses and, as a result, 2. To recast the thinking in improved form" (Center for Critical Thinking, 1996c).

Perhaps the simplest definition is offered by Beyer (1995): "Critical thinking... means making reasoned judgments" (p. 8). Basically, Beyer sees Critical Thinking as using criteria to judge the quality of something, from cooking to a conclusion of a research paper. In essence, Critical Thinking is a disciplined manner of thought that a person uses to assess the validity of something (statements, news stories, arguments, research, etc.).

Critical Thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. In its exemplary form, it is based on universal intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness.

Educators are not alone in recognizing the importance of critical thinking. The demands of employment in a global economy, the survival of a democratic way of life, and personal decision making in a complex and rapidly changing society require people who can reason well and make good judgments.

The society needs citizens who can fair-mindedly evaluate the relevance of different perspectives on complex problems. Additionally, making sound personal and civic decisions requires the ability to interpret accurately information filtered by media that emphasize

promotion and imagery over reason (Goodlad & McMannon, 1997; Halpern, 1998; Holmes & Clizbe, 1997; Hudson Institute, 1987; Hunt, 1995; King, 1994; Packer, 1992; Secretary's Commission on Achieving Necessary Skills, 1991). For students, workers, and citizens, ThinkingCritical Thinkingis an essential tool for performing successfully in a complex and rapidly changing world. In each of these roles, as David Perkins (1989) points out, we must examine the factors impinging on a situation, forecast the outcomes of possible courses of action, evaluate those outcomes and weigh them relative to one another, and try to choose so as to maximize positive outcomes and minimize negative ones. Further, the beliefs we hold, and consequently the inferences we later make and attitudes we later assume, depend in part on our reasoning about the grounds for those beliefs. Accepting beliefs wisely serves the ultimate end of later sound conduct as well as the more immediate end of sound belief itself.

Critical Thinking can be seen as having two components: 1) a set of information and belief generating and processing skills, and 2) the habit, based on intellectual commitment, of using those skills to guide behavior. It is thus to be contrasted with: 1) the mere acquisition and retention of information alone, because it involves a particular way in which information is sought and treated; 2) the mere possession of a set of skills, because it involves the continual use of them; and 3) the mere use of those skills ("as an exercise") without acceptance of their results.

According to Facione (2007), critical Thinking is defined in terms of six cognitive skills: interpretation, analysis, evaluation, inference, explanation, and self-regulation. these skills are discussed in greater detail below.–

1. *Interpretation skill.* Facione (2007) defines interpretation as comprehending and expressing meaning based on experiences, situations, data, and beliefs. The interpretation skill is comprised of two sub-skills: *categorization*, used when students locate appropriate key elements from the story and apply them to the mind mirror poster; and *clarifying meaning*, demonstrated when students review and discuss the connection between key elements and character identity.–

2. *Inference skill.* Inference means considering relevant information and determining the consequences resulting from data, statements, beliefs, or other forms of representation (Facione 2007). As a sub-skill of inference, students had to *draw a conclusion* to identify characters based on elements exhibited on posters.–

3. *Self-regulation skill.* The self-regulation skill is perhaps the most remarkable Critical Thinking skill because it enables critical thinkers to improve their own thinking. Self-regulation occurs when we self-consciously monitor and evaluate our own work with a view toward questioning, confirming, or correcting either our reasoning or results (Facione 2007). *Self-examination* and *self-correction* are two sub-skills of self-regulation. Students used self-examination to remind themselves that viewers should be able to see a clear and obvious connection between the character and corresponding mind mirror elements. As a result, students used self-correction skills to revise mind mirror elements to better reflect the character represented. Additionally, students used self-examination skills by reflecting on the connection between tasks and Critical Thinking skills used throughout the project.

Despite widespread expressions of concern about developing critical thinkers, studies have shown that most schools are neither challenging students to think critically about academic subjects nor helping them develop the reasoning abilities needed to deal successfully with the complexities of modern life. Our educational system continues to graduate students who do not

reason well. Recent studies by Perkins and associates (Perkins, 1989; Perkins, Faraday, & Bushey 1991) and Kuhn (1992) have documented the faulty everyday reasoning and poor argumentation skills used by most people. Even a college education appears to have a limited effect on graduates' Critical Thinking abilities, including making reasonable interpretations of texts and formulating well-reasoned arguments (Halpern, 1998; Keeley & Browne, 1986; Kurfiss, 1988; Perkins, 1985).

2.2 Teaching Strategies to Promote Critical Thinking
The 1995, Volume 22, issue 1, of the journal, *Teaching of Psychology*, is devoted to the teaching critical thinking. Most of the strategies included in this section come from the various articles that compose this issue.

Classroom Assessment Techniques(CATS) : Angelo stresses the use of ongoing classroom assessment as a way to monitor and facilitate students' critical thinking. An example of a CAT is to ask students to write a "Minute Paper" responding to questions such as "What was the most important thing you learned in today's class? What question related to this session remains uppermost in your mind?"
The teacher selects some of the papers and prepares responses for the next class meeting.

Cooperative Learning Strategies: Cooper (1995) argues that putting students in group learning situations is the best way to foster critical thinking. "In properly structured cooperative learning environments, students perform more of the active, Critical Thinking with continuous support and feedback from other students and the teacher".

Case Study /Discussion Method: McDade (1995) describes this method as the teacher presenting a case (or story) to the class without a conclusion. Using prepared questions, the teacher then leads students through a discussion, allowing students to construct a conclusion for the case.

Using Questions: King (1995) identifies ways of using questions in the classroom:
Reciprocal Peer Questioning: Following lecture, the teacher displays a list of question stems (such as, "What are the strengths and weaknesses of...). Students must write questions about the lecture material. In small groups, the students ask each other the questions. Then, the whole class discusses some of the questions from each small group.
Reader's Questions: Require students to write questions on assigned reading and turn them in at the beginning of class. Select a few of the questions as the impetus for class discussion..

Thus, after reviewing the different studies it became clear that students have to develop their knowledge while learning. They should not limit their ideas to be able to think and write critically and express their own opinions with creativity. To enhance and expand students' creativity regarding Critical Thinking teachers must make their lesson entertaining by creating lots of fun activities to grab the students' attention and to keep them interested all the time. Moreover, both the students and the teachers must respect each other's opinions and share ideas in order for the students to be critical thinkers and become successful writers in the futures.

3. Method
3.1 Research Design
This study utilized qualitative, action-based research in which student progress (the effect of the training) was evaluated by comparing student writing samples from before the focused CT training— based on five areas of writing-centered skills— to samples from after the focused CT training, evaluating the effect on student Thinking through a progressive analysis of their

writing through rubric assessment over the course of several weeks (accounting for four in-class writing assignments). Specifically, the study looked for signs of heightened writing skills, reflected by an increased clarity of writing, level of analysis, use of supporting information, organization of ideas, and accuracy of grammar and syntax, which was measured quantitatively using a rubric system.

This study measures the effects of the training in these areas on a senior level research writing course that had spent the four weeks prior to the researcher's introduction to the class working on senior projects.

Through interviewing both students and teachers in Yanbu University College it became clear that most students find it difficult to write in English. Writing is a challenge for most EFL learners. The study was limited to senior female students at Yanbu University College. This current study samples EFL Saudi female students from Yanbu University College and hopes to offer a broader look at how   ThinkingCritical Thinkingskills could be used more to improve students' writing.

This study works from the principle that the purpose of Critical Thinking is to motivate action; and from the demonstrated understanding that an emerging awareness of Thinking strategies on the part of the learner leads to an awareness of thinking capabilities, which are reflected by an ability to make connections to prior knowledge, increased self-reliance in terms of educational pursuits, and a willingness to take a risk in order to explore solutions to problems. This research was carried out in Yanbu University College.

The present study used an experimental research design**.** The experimental design used had one group of students who were subjected to pre-testing and post-testing means of collecting data. Students were exposed to a systematic training of some activities based on their Critical Thinking skills used to develop their writing.

As stated earlier, the objective of this study is to ascertain the effects of teaching/learning Richard Paul's "Elements and Standards of Reasoning" on senior level students' writing in the areas of clarity of writing, analysis of student's argument, use of supporting information, organization, and grammar and syntax.

All Critical Thinking instruction was done by the researcher. Rather than seeing their progress on the rubric, students were assessed points on their essays by the researcher.

3.2 Research Procedures

Stage One
Before Focused Critical Thinking Training
      Activity 1
Exercise 1:
Brainstorming: How to Graduate from College

Students were asked to brainstorm the answer to this question, "What are all the things that could interfere with graduating from college?"

Then students have to choose one item from the list and generate as many solutions for this problem as possible. This is a good creativity exercise as well as getting students to apply creative problem solving to their own lives.

Exercise 2:
When the initial observation period began, the students were nearly finished with a unit that focused on an essay on studying abroad.
The students were given a long essay about "Qualities of a Good Teacher" and put into eight groups based on scaffolding practices that favored placing students with like-performing peers.
By highlighting sections with various colored markers and pens, the students were given the assignment of identifying the author's thesis, the supporting evidence; the background information used, and were asked to state three questions they would ask the author if she were present. The students were given two and a-half two hour periods to complete the assignment for a total of five hours.
After the two and -a -half class periods, the students were given the following in-class writing activity:
Write a well-developed argument that shows the degree to which you agree and/or disagree with idea that abuse and neglect have no place in a loving relationship— especially between a teacher and student. Use carefully chosen evidence to support your reasoning.
The students were given two hours to complete the activity. All work had to be done by hand (no computers were allowed) and in pen.

Results of Activity 1
The activity was assessed by the master teacher based on a 1 -5 rubric (designed by the researcher) that examined five aspects of writing and analysis:
1. Clarity of Writing
2. Analysis of author's argument
3. Use of supporting information
4. Organization
5. Grammar and Syntax
The results from this first activity provided a good idea of where the students were in terms of the five points of measurement before the focused CT training. It called attention to the areas that needed improvement (Use of Supporting Information, Organization, Grammar and Syntax) and provided a strong point of reference in measuring the effect of the E&S' on the students' composition. (See Appendix A)

Stage Two

Focused Critical Thinking Training
Learning only begins when teachers challenge students with real questions that demand a solution (Moeller, 2005), and Critical Thinking is best observed when students see the value in it and are self-motivated (Dellet, et al.).
Therefore, this study placed a high priority on helping students see why Critical Thinking is important to them, and quickly applying it to questions that are interesting and relevant to their lives (Bomer, 2000), rather than spending a lot of instructional time on uninteresting abstract concept learning.

On the first day of the research, the students were given a questionnaire that asked what they know about Critical Thinking (see Appendix B). Not surprisingly, most of the students believed they had a good understanding of what Critical Thinking is, believing they had been taught it "since freshman year". This belief mirrored research done by Richard Paul, which showed that most students believe that they've been trained how to think critically, though the reality is quite different (1993).

Also very few of the students had a coherent understanding of what CT is, and what it involves. Question 1 of the questionnaire ("What is critical thinking?") yielded respectable responses (e.g. "Not believing everything you hear", " Thinking things through", "Asking questions"), but the questions that asked the students to be more specific made plain their unfamiliarity with formal CT practices. For instance, out of the twenty students, only nine (24%) were able to name a components or elements of Critical Thinking (as defined by Paul).

However, when asked "What Standards do you use when you evaluate someone's thinking?" 90% of students were able to name at least two standards that roughly matched descriptions used by Paul in his "Standards of Reasoning". Popular answers were "logical", "true", and "enough information", which correspond to Paul's "logical", "accurate" and "broad" Standards, respectively.

When asked "Why is it important to understand how to think critically?" their answers were unfocused— "To learn how to think", "To understand the world", "To appreciate life", "To get right answers". Interestingly, none of the students personalized the importance of learning Critical Thinking skills —e.g. "So that I can learn how to think… So that I can understand the world… So that I can know myself". This fact perhaps reflects the students' general lack of CT skills.

Next, the class was given a series of questions. Some of those questions were:

Is abusing students right or wrong?

Is cheating right or wrong?

Is hitting students right or wrong?

These questions were designed to elicit an obvious answer: "They're wrong!" But when the students answered this way, they were asked to explain why these actions are wrong. After discussion, the students found that though they generally thought themselves to be trained critical thinkers, they had no reasons for why they held to certain moral principles. They got a glimpse of t Thinking wasn't just an abstract thing they thought they had learned—it became real life. The students were then encouraged to write their own questions for discussion. After a brief lecture about the importance of CT, the students seemed ready to learn how to think.

Diane Painter argues that in teaching Critical Thinking it is "important to provide many opportunities for varied learners to make sense of ideas and information" in a context where challenge is moderate (2000). Thus, the E&S' weren't immediately defined for the students; rather, the students were put into their groups and asked to develop their own understandings of the concepts on the page, based on their prior knowledge of the definitions of the words (Hedberg, 2002). The groups then shared their definitions in front of the class. These definitions were combined and shaped into accurate definitions that were compiled onto a single sheet and distributed the next meeting period.

At the beginning of the next class meeting, each student was presented with a copy of the "Elements of Reasoning and Universal Intellectual Standards" (Appendix D). In order to practice using these new CT tools, the class was engaged in a discussion. They were given the chance to

select a topic to discuss and they agreed to discuss "Punishment and reward in the classroom". Students were divided into two groups and they were given ten minutes to write their reasons for their ideas. The board was divided into two parts.

Both groups were given ten minutes to write their reasons for holding their positions on the board. At the end of the ten minutes, the two sides cross-examined one another using the E&S' to assess why the other side held the views they held (i.e. Purpose, Information, Point of View, etc.), and whether those reasons stood up to assessment (i.e. Logical? Accurate? Clear?). The students were then allowed to revise their boards before another cross examination.

The students found this exercise to be a lot of fun, taking great delight in their CT new tools that would allow them to assail their peers 'position. The key, though, was to get the students to use the E&S' by name, and establish the expectation that they use them in all future exercises.

Stage Three
After Focused Critical Thinking Training
Activity 2: Language teaching and learning.
After the introduction and training in Paul's E&S', the students were introduced to an article, the students read about empowering the learners, "Empowering The Learner and All That Rubbish by Dr Anthony Bynom, 2013
In reading this article, the students went through it and answered the following questions:
1. What is the author's Purpose? Is his Purpose Clear?
2. What is his Point of View? Is his Point of View Logical?
3. What Information does he use to support her view? Is his information Accurate? Is his information sufficiently Broad?
This exercise took one two -hour class session to complete.
Results of Activity 2
The activity was assessed based on a rubric that examined the same five aspects of writing and analysis as the first essay (See Appendix B). Though the class-wide gains in Clarity, Analysis, Support, Organization and Gram marks were modest (10%), the results of the CT training were encouraging for one particular group — the Lower-level students who saw their average score go from 9.5 on the first essay to 14 on the second! In other words, the Lower level emerged from 4.5 points behind their ELL and Mid- level students to equal these two groups in terms of overall achievement.

Although the success for the Lower-level students was encouraging, modifications needed to be made before the second assignment in order to obtain similar gains among the rest of the class.

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Activity 3
To begin, the students were put into their groups, and after a brief lecture by the researcher, they were given the article **"Is Attitude the Key to Success" essay**. They were told that "this article can change your life and can be a starting point for your new and more positive life. We are sure you will understand everything after your "Is Attitude the Key to Success" essay will be finished".

How are they going to support your thesis? What arguments will they use to prove your position? In the next class time, the students were again assembled into their groups, after which the class was Students were engaged in a discussion using the "KWL" strategy to uncover their current

Students have the main question to answer. Do you believe that attitude, particularly positive attitude and thinking, are the main keys to success?, They were then encouraged to send one group representative to use a laptop to do an internet search on the case to gather information, which they took back to t heir groups. They were told that their opinions will be the thesis statement of the **"Is Attitude the Key to Success" essay**.

knowledge and desired knowledge. They were given very little direction from the researcher on how to approach the article. They were simply told, "OK, get to work on the article… use your Elements and Standards". The students used most of two-hour period dissecting the article to uncover   the   author's   Purpose,   Point   of   View,   etc.
To make a well-supported essay on "Attitude Is the Main Key to Success" use examples of rich and successful people. Whose name comes to your mind first?
Let us take Bill Gates as one of the best examples for your **"Is Attitude the Key to Success" essay**. Next, find out his secrets of success, his opinion about positive attitude. Surf the Web, collect several quotes, and use them in your essay on "Attitude Is the Key to Success".

There is one more way to collect evidences for **"Is Attitude the Key to Success" essays**. You definitely have successful teachers or friends in the college. Why do you not talk to them? Sure, all of them think positively.
Interview several people and then present results of your investigation in the "Is Attitude the Key to Success" essay.
The following class meeting, the students were again grouped together, and after a twenty minute discussion about the case.
They were asked to get to work on the article… use their Elements and Standards. The students used the entire class time to complete the task.
Following the strategy from Activity 2, the students were given a modified but essentially identical outline to the one they used on this activity. The results were similarly encouraging.

Results of Activity 3
This final activity was assessed based on a 1-5 rubric that examined the five aspects of writing and analysis which this study has focused on. Again, the class as a whole, and as individuals, exhibited encouraging gains and improvements in all areas of the rubric assessment for the first time since the research began. The students improved in clarity of their writing.
The effect of focused Critical Thinking instruction based on Richard Paul's Elements and Standards of Reasoning, when measured by a five-point rubric, became clear, in that students' level of writing is highly improved. (Appendix C)

Conclusion
The clear value of using Richard Paul's E&S's in developing writing skills of senior students is in the improvements students made in terms of clarity of writing, level of analysis, use of supporting information, organization of ideas, and accuracy of grammar and syntax. As the research results indicated, measurable improvements were made the very next activity after introducing the E&S's.

The improvement in students' composition skills is dynamic, with most groups improving throughout the research. Critical thinking has been neglected in some schools in Saudi Arabia. Writing skill is considered as an important part to learn a language. If the students do not know how to write, there will be gaps in their learning the prior knowledge and skills necessary for writing skill. So, students must have a lot of vocabulary, follow the grammar roles, have knowledge about the topic, plan to what are they writing and they need lots of practice.

Critical thinking is an important skill that we need in every area of your life. Using critical thinking well allows us to open our thinking for new ideas and things. Also critical thinking make learning clear and make students understand the purpose of what they are thinking. This study showed an overall positive result of using critical thinking to improve students writing skill.

It is recommended for teachers to promote their students' critical writing and enhance their writing skills to understand their students' problems, and always try to motivate them to learn. Writing is the difficult skill for them so they have to make them feel that teachers understand their situation and are willing to see more effort from them in next classes.

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Appendix (A)

Results of Activity 1

Average	3.3	2.6	2.50	2.6	3	13.8
High Level Students	4	3	4	3	4	18
Mid Level Students	4	3	2	2	3	14
Low Level Students	2	2	2	1.5	2	9.5

Appendix (B)

Results of Activity 2

	Clarity	Analysis	Support	Organization	Grammar	Total
High Level Students	4	3	4	3	4	18
Mid Level Students	4	3	2	2	3	14
Low Level Students	2	3	3	3	3	14
Average	3.3	3	4	2.6	3.3	15.3

Appendix (C)

Results of Activity 3

	Clarity	Analysis	Support	Organization	Grammar	Total
High Level Students	4	5	5	5	4	23
Mid Level Students	4	4	4	4	4	20
Low Level Students	4	4	4	4	3	20
Average	4	4.3	4.3	4.5	3.6	21

Appendix (D)

Elements and Standard of Reasoning

Elements of
Reasoning

Points of View
frame of reference,
perspective, orientation

Purpose of
the Thinking
goal, objective

Implications &
Consequences

Question at Issue
problem

Elements
of
Reasoning

Assumptions
presupposition, taking for
granted

Information
data, facts, observations,
experiences

Concepts
theories, definitions,
axioms, laws, principles,
models

Interpretation &
Inference
conclusions, solutions

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