ABSTRACT:
This study aims to investigate argumentative essay strategies on developing EFL learners critical thinking skills; including methods and materials that has been delivered during 30 hours of instruction. An experimental and controlled groups were employed in a view that to enable the researcher pin down where the problems lie with short period of time and can see critical thinking skills developed by argumentative essay strategies. Pre and post test were used as a research instrument the study sample consists of 40 students male and female students. SPSS was used to analyzed the data obtained. The major findings include: Firstly; Third year students can achieve critical thinking skills through writing argumentative essay if they well trained on strategies of writing argumentative essay properly. Secondly: The period of 30 hours of instruction is quiet enough to teach this amount of course perfectly and train the students as well. Thirdly: This study implication's is that strategies of argumentative essay can help students to become critical thinkers because the improvement was positive.

Key words: Brainstorming, Extensive Writing, Questioning.

INTRODUCTION:
The skill which is intended to provide these students, is an intensive skill at Sudan University of Science and Technology, Faculty of Education; Third year. It is a skill which is to some extent ignored in Sudan that is Critical Thinking Skills and how can argumentative
essay strategies help in developing critical thinking skills. Students during this program study 30 hours of instruction equal one academic semester.

Ennis (1987) offers a philosophical taxonomy suggesting that critical thinking results from the interaction of a set of dispositions toward critical thinking with a set of abilities for critical thinking. The psychological taxonomy presented by Sternberg (1986) depicts the skills involved in critical thinking to be of three kinds: meta components, performance components, and knowledge-acquisition components. According to Bloom's (1956) taxonomy of education, knowledge is at the lowest level, followed by comprehension, application, analysis, and synthesis, and evaluation is at the highest level. In this study the researcher tries to connect argumentative essay strategies and how they can develop EFL Learners critical thinking skills.

**Critical Thinking Approaches: The philosophical approach.**

The writings of Socrates, Plato, Aristotle, and more recently, Matthew Lipman and Richard Paul, exemplify the philosophical approach. This approach focuses on the hypothetical critical thinker, enumerating the qualities and characteristics of this person rather than the behaviors or actions the critical thinker can perform (Lewis & Smith, 1993; Thayer-Bacon, 2000). Sternberg (1986) has noted that this school of thought approaches the critical thinker as an ideal type, focusing on what people are capable of doing under the best of circumstances. Accordingly, Richard Paul (1992) discusses critical thinking in the context of “perfections of thought” (p. 9). This preoccupation with the ideal critical thinker is evident in the American Philosophical Association’s consensus portrait of the ideal critical thinker as someone who is inquisitive in nature, open-minded, flexible, fair-minded, has a desire to be well-informed, understands diverse viewpoints, and is willing to both suspend judgment and to consider other perspectives (Facione, 1990). Those working within the philosophical tradition also emphasize qualities or standards of thought. For example, Bailin (2002) defines critical thinking as thinking of a particular quality—essentially good thinking that meets specified criteria or standards of adequacy and accuracy. Further, the philosophical approach has traditionally focused on the application of formal rules of logic (Lewis & Smith, 1993; Sternberg, 1986). One limitation of this approach to defining critical thinking is that it does not always correspond to reality (Sternberg, 1986). By emphasizing the ideal critical thinker and what people have the capacity to do, this approach may have less to contribute to discussions about how people actually think. Definitions of critical thinking emerging from the philosophical tradition include “the propensity and skill to engage in an activity with reflective skepticism” (McPeck, 1981, p. 8); “reflective and reasonable thinking that is focused on deciding what to believe or do” (Ennis, 1985, p. 45); “skillful, responsible thinking that facilitates good judgment because it 1) relies upon criteria, 2) is self-correcting, and 3) is sensitive to context” (Lipman, 1988, p. 39); purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or conceptual considerations upon which that judgment is based” (Facione, 1990, p. 3); “disciplined, self-directed thinking
that exemplifies the perfections of thinking appropriate to a particular mode or domain of thought” (Paul, 1992, p. 9); Thinking that is goal-directed and purposive, “thinking aimed at forming a judgment,” where the thinking itself meets standards of adequacy and accuracy (Bailin et al., 1999b, p. 287); and “judging in a reflective way what to do or what to believe” (Facione, 2000, p. 61).

The cognitive psychological approach
The cognitive psychological approach contrasts with the philosophical perspective in two ways. First, cognitive psychologists, particularly those immersed in the behaviorist tradition and the experimental research paradigm, tend to focus on how people actually think versus how they could or should think under ideal conditions (Sternberg, 1986). Second, rather than defining critical thinking by pointing to characteristics of the ideal critical thinker or enumerating criteria or standards of “good” thought, those working in cognitive psychology tend to define critical thinking by the types of actions or behaviors critical thinkers can do. Typically, this approach to defining critical thinking includes a list of skills like analysis and synthesis or procedures performed by critical thinkers (Lewis & Smith, 1993). Philosophers have often criticized this latter aspect of the cognitive psychological approach as being a complex orchestration of knowledge and skills into a collection of disconnected steps or procedures (Sternberg, 1986). For example, Bailin (2002) argues that it is a fundamental misconception to view critical thinking as a series of discrete steps or skills, and that this misconception stems from the behaviorist’s need to define constructs in ways that are directly observable. According to this argument, because the actual process of thought is unobservable, cognitive psychologists have tended to focus on the products of such thought—behaviors or overt skills (e.g., analysis, interpretation, formulating good questions). Other philosophers have also cautioned against confusing the activity of critical thinking with its component skills (Facione, 1990), arguing that critical thinking is more than simply the sum of its parts (Van Gelder, 2005). Indeed, a few proponents of the philosophical tradition have pointed out that it is possible to simply “go through the motions,” or proceed through the “steps” of critical thinking without actually engaging in critical thought (Bailin, 2002).

Definitions of critical thinking that have emerged from the cognitive psychological approach include “the mental processes, strategies, and representations people use to solve problems, make decisions, and learn new concepts” (Sternberg, 1986, p. 3); “the use of those cognitive skills or strategies that increase the probability of a desirable outcome” (Halpern, 1998, p. 450); and “seeing both sides of an issue, being open to new evidence that disconfirms your ideas, reasoning dispassionately, demanding that claims be backed by evidence, deducing and inferring conclusions from available facts, solving problems, and so forth” (Willingham, 2007, p. 8).

The Educational approach.
Finally, those working in the field of education have also participated in discussions about critical thinking. Benjamin Bloom and his associates are included in this category. Their taxonomy for information processing skills (1956) is one of the most widely cited sources for educational practitioners when it comes to teaching and assessing higher-order thinking.
skills. Bloom’s taxonomy is hierarchical, with “comprehension” at the bottom and “evaluation” at the top. The three highest levels (analysis, synthesis, and evaluation) are frequently said to represent critical thinking (Kennedy et al., 1991).

The benefit of the educational approach is that it is based on years of classroom experience and observations of student learning, unlike both the philosophical and the psychological traditions (Sternberg, 1986). However, some have noted that the education approach is limited in its vagueness. Concepts within the taxonomy lack the clarity necessary to guide instruction and assessment in a useful way (Ennis, 1985; Sternberg, 1986). Furthermore, the frameworks developed in education have not been tested as vigorously as those developed within either philosophy or psychology (Sternberg, 1986).

**Here are some of the characteristics of such a thinker:**
- uses evidence skillfully and impartially
- organizes thoughts and articulates them concisely and coherently
- distinguishes between logically valid and invalid inferences
- suspends judgment in the absence of sufficient evidence to support a decision
- understands the difference between reasoning and rationalizing
- Attempts to anticipate the probable consequences of alternative actions
- understands the idea of degrees of belief
- sees similarities and analogies that are not superficially apparent
- can learn independently and has an abiding interest in doing so
- applies problem-solving techniques in domains other than those in which learned
- can strip a verbal argument of irrelevancies and phrase it in its essential terms
- Habitually questions one's own views and attempts to understand both the assumptions those are critical to those views and the implications of the views.
- recognizes the fallibility of one's own opinions, the probability of bias in those opinions, and the danger of weighting evidence according to personal preferences.

**Essential Intellectual Traits:**

1-Intellectual Humility vs. Intellectual Arrogance

Having a consciousness of the limits of one’s knowledge, including sensitivity to circumstances in which one’s native egocentrism is likely to function self-deceptively; sensitivity to bias, prejudice and limitations of one’s viewpoint. Intellectual humility depends on recognizing that one should not claim more than one actually knows. It does not imply spinelessness or submissiveness. It implies that lack of intellectual pretentiousness, boastfulness, or conceit, combined with insight into the logical foundations, or lack of such foundations, one’s beliefs.

2-Intellectual Courage vs. Intellectual Cowardice

Having a consciousness of the need to face and fairly address ideas, beliefs, or viewpoints toward which we have strong negative emotions and to which we have not given a serious hearing. This courage is connected with the recognition that ideas considered dangerous or absurd are sometimes rationally justified (in whole or in part) and that conclusions and beliefs inculcated in us are sometimes false or misleading. To determine for ourselves which is which, we must not passively
and uncritically “accept” what we have “learned.” Intellectual courage comes into play here, because inevitably we will come to see some truth in some ideas considered dangerous and absurd, and distortion or falsity in some ideas strongly held in our social group. We need courage to be true to our own thinking in such circumstances. The penalties for nonconformity can be severe.

3-Intellectual Empathy vs. Intellectual Close-mindedness
Having a consciousness of the need to imaginatively put oneself in the place of others in order to genuinely understand them, this requires the consciousness of our egocentric tendency to identify truth with our immediate perceptions of long-standing thought or belief. This trait correlates with the ability to reconstruct accurately the viewpoints and reasoning of others and to reason from premises, assumptions, and ideas other than our own. This trait also correlates with the willingness to remember occasions when we were wrong in the past despite an intense conviction that we were right, and with the ability to imagine our being similarly deceived in a case-at-hand.

4-Intellectual Autonomy vs. Intellectual Conformity
Having rational control of one’s beliefs, values, and inferences. The ideal of critical thinking is to learn to think for oneself, to gain command over one’s thought processes. It entails a commitment to analyzing and evaluating beliefs on the basis of reason and evidence, to question when it is rational to question, to believe when it is rational to believe, and to conform when it is rational to conform.

5-Intellectual Integrity vs. Intellectual Hypocrisy
Recognition of the need to be true to one’s own thinking; to be consistent in the intellectual standards one applies; to hold one’s self to the same rigorous standards of evidence and proof to which one holds one’s antagonist; to practice what one advocates for others; and to honestly admit discrepancies and inconsistencies in one’s own thought and action.

6-Intellectual Perseverance vs. Intellectual Laziness
Having a consciousness of the need to use intellectual insight and truth in spite of difficulties, obstacles, and frustrations; firm adherence to rational principles despite the irrational opposition of others; a sense of the need to struggle with confusion and unsettled questions over an extended period of time to achieve deeper understanding or insight.

7-Confidence in Reason vs. Distrust of Reason and Evidence
Confidence that, in the long run, one’s own higher interests and those of humankind at large will be best served by giving the freest play to reason, by encouraging people to come to their own conclusions and developing their own rational faculties; faith that, with proper encouragement and cultivation, people can learn to think for themselves, to form rational viewpoints, draw reasonable conclusions, think coherently and logically, persuade each other by reason and become reasonable persons, despite the deep-seated obstacles in the native character of the human mind and in society as we know it.

8-Fair-mindedness vs. Intellectual Unfairness
Having a consciousness of the need to treat all viewpoints alike, without reference to one’s own feelings or vested interests, or the feelings or vested interests of one’s friends, community or nation; implies adherence to intellectual standards without reference to one’s own advantage or the advantage of one’s group.

Critical thinking schools:
There are many perspectives look at critical thinking from different angles like:

Critical Thinking as a Set of Skills
The first perspective holds that critical thinking is a set of mental skills that can be taught and learned independently (Anderson & Soden, 2001; Astleitner, 2002; Bellis, 2004; Stoney & Oliver, 1999). More specifically, this school of thought tends to view critical thinking in terms of a process and/or an outcome whereby the student engages in discrete cognitive skills e.g., analyzing, assessing the merits of an argument, etc. to develop a revised truth claim (Ennis, 1995; Garrison, Anderson, & Archer, 2004). Scholars of this perspective hold that critical thinking skills can be learned independent of specific disciplines, and the learned capabilities transferred to other cognitive domains. An example of this perspective may be best illustrated in Ennis’ (2000) proposition that critical thinking is reasonable, reflective thinking that helps students decide what to believe and do. This ability to decide does not appear restricted to a particular cognitive domain.

Critical Thinking as a Personality Trait
A second perspective contends that critical thinking is a personality trait or disposition that must be cultivated before the thinker can truly be considered a critical thinker (Brabeck, 1983; Facione, 1998; Meyers, 1986; Paul, 1982; Siegel, 1992; Tama, 1989). The personality trait as this approach is sometimes called or the propensity to be a critical thinker, is a trait learned over time through well-structured courses, which cultivate the objectively skeptical mind (Taba, 1979). The critical thinker here is viewed as a person who engages in a rational process of assimilating and assessing data as a matter of personal behavior. Some scholars in this school believe that teaching critical thinking skills is of no avail if the student does not have the propensity or personality trait to use and hone those skills (Couros, 2002; Taba, 1979). There seems nonetheless to be some overlap in this perspective with those who subscribe to the idea that critical thinking skills can be learned independent of tendency or traits. Paul (1982), for instance, emphasizes skills in critical thinking, (2000) Paul also includes the willingness to be analytical about other positions besides one’s own as well as being critical about one’s own position, which is viewed more as a personality trait or characteristic.

Critical Thinking as Episodes of Cognition
The third perspective holds that critical thinking is an episodic phenomenon wherein students use a combination of higher-order cognitive skills that can be taught, such as creative thinking or decision making (Hunt, 2002; Lipman, 1988; McCarthy, 1992). Here is a distinction made between rationality as a trait and critical thinking as an activity. This perspective proposes that the student can engage in rational thought without being a critical thinker, but must employ the personality trait of being rational as the basis for thinking critically (McCarthy, 1992). It is the propensity of the student to act upon rational thought in discrete instances that is believed to be the mark of the critical thinker in this paradigm. Further, in this school of thought the student’s ability to think critically occurs in discrete instances and is not a routine or continuous process. Domain-Specific Cognition. McPeck (1981) supports the construct of critical
thinking as occurring in episodes, but he goes farther and contends that critical thinking is subject specific and requires the thinker to have a certain level of skill or familiarity with a specific knowledge domain. From this point of view, McPeck (1981) proposes that the critical thinking skills and personality traits are not sufficient to help the thinker to determine what good evidence is and what putative evidence is. The thinker in this model must also have a significant knowledge base in a particular domain in order to understand the nuances of the “language-game” (p. 37) the domain uses to be capable of thinking critically. The differences between the perspectives concerning dispositional critical thinkers (Facione, 1998; Paul, 2004a; Siegel, 1992) and episodic critical thinkers (Hunt, 2002; Lipman, 1988; McCarthy, 1992) are not however static or exclusive. For instance, McCarthy (1992) espouses critical thinking as an episodic phenomenon but also states that it is “at least in part some sorts of disposition” (p. 3). Both schools of thought consider personality traits as influential in critical thinking, but they differ as to the degree of influence. Also, both the personality trait school and the domain-specific theory (Lazere, 1987; McPeck, 1981) suggest that to teach critical thinking one must consider more than the skills attainment proposed in the school of

**Objectives of the Study:**

- To suggest some remedies to how can we promote critical thinking skills through argumentative essay writing.

**The main hypothesis:**

- Argumentative essay strategies can develop English as a foreign language learners critical thinking skills.

**Material and Methods**
intends to check out where the problems lies. Descriptive and analytical approach was adopted to check the objectives of the study.

The Sample:
The number of students from in group was selected randomly as follows:
Group A 20 Students (Controlled Group). Group B 20 Students (Experimental Group)
Third Year Students, Sudan University of Science and Technology.

Some strategies of developing EFL Learners critical thinking skills
There are many strategies through which EFL Learners can develop their critical thinking skills there are:
1. Brainstorming Strategy: brainstorming is an innovative conference with special nature in order to produce a list of ideas that can be used as clues lead students to the development of the problem while giving each student the chance to express her ideas and share those ideas with others and encourage new ideas (Al-blwi, 2006). Al-maghrawy, (2012) defines brainstorming as a group creativity forum for general ideas. According to Zayton (2001), brainstorming was developed by Alex Osborn to produce ideas without inhibition. Brainstorming technique involves oral and pre-writing exercises for helping the learner and for expressing ideas by the teacher.

Engaging ELF in more extensive writing:
Philosophers, psychologists, and educators have, throughout history, unanimously emphasized the art, science, and practice of thinking. Likewise, what the twentieth century witnessed, as cotton (1991) observes, was the emphasis placed upon the integral significance of the ability to engage in careful, reflective thinking. Cotton states that this type of thinking is currently "viewed in various ways: as a fundamental characteristic of an educated person, as a requirement for responsible citizenship in a democratic society, and, more recently, as an employability skill for an increasingly wide range of jobs" (p. 1). However, the central role thinking plays tends to be more manifest in the realm of education.

Improving critical thinking through Media Analysis:
To help students develop the habits of inquiry and skills of expression they need to be critical thinkers, effective communicators and active citizens in today’s world. Encourage students to pay attention to print, audio and visual elements in media sources, noting information that can be learned, and impressions created from the images and sounds. Basic Ways to Integrate Media Literacy and Critical Thinking into Any Curriculum, Cyndy Scheibe and Faith Rogow, (2008)

4. Socratic questioning and critical thinking Improvement:
Socrates has been recognized as one of the founders of western philosophy. He innovated a method of instruction based on questioning. Socratic questioning was based on a series of organized and systematic questions which helped the students gain awareness towards their ignorance, misconceptions, wrong assumptions, and false conclusions model of instruction does not rely on memorizing the discrete pieces of information a teacher lectures or a textbook presents. In this model questions are asked for which there are no definitive answers, in fact the questioner does not seek such answers. The philosophy behind this method is to stimulate the thinking. According to Sigel (1979) Socratic enquiry serves the cause of cognitive
development because they activate representational thought.

5. **Task-based learning and critical thinking:**
Problem-Based Learning (PBL) is defined as the student-centered and self-directed pedagogical approach (Barrows, 1996; Kek & Huijser, 2011). PBL requires that the learning is done a small group which consists of 6 - 10 persons ideally. Problems form the basis of the learning focus on and simulate the students’ cognitive development. Task-based learning (TBL) is also the learner-centered teaching methods.

**Argumentative Essay Writing Test (Pre-Test and Post-Test)**
The test consists of writing argumentative essay. The items are well constructed after being assessed by some colleagues and research experts who work at the college. The duration of the course is 30 hours of instruction equal one academic semester.

**Validity and Reliability of the instrument**

The tests are believed to have content validity as they aimed at assessing the students’ development in their critical thinking skills. The tasks required in the tests were comparable to those covered. The test instructions were written clearly in English and the examinee’s task required was defined. Furthermore, the tests were validated by a group of experts who suggested some valuable remarks about the tests and the researcher responded to that. For the test reliability, the study used the test-retest method: The test-retest method of estimating a test's reliability involves administering the test to the same group of people at least twice. Then the first set of scores is correlated with the second set of scores. Correlations range between 0 (low reliability) and 1 (high reliability) (highly unlikely they will be negative!). The coefficient correlation formula was used to calculate the correlation:

\[
r = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt{[n\Sigma x^2 - (\Sigma x)^2][n\Sigma y^2 - (\Sigma y)^2]}}
\]

The above table shows the correlation between the two variables. The Sig. is less than 0.05. This means that there is a strong positive correlation. People who did badly on the pre-test also did badly on the post-test.
The above table shows the correlation between the two variables. The Sig. is less than 0.05. This means that there is a strong positive correlation. People who did well on the pre-test also did well on the post-test.

**Results and discussion**

The analysis of the experiment will focus on answering a vital question: To what extent does argumentative essay strategies develop English as a foreign language learners critical thinking skills? To answer this question, we computed the mean, standard deviation, standard error and ranges for the pre-test- and post-test scores of both experimental and control groups. To find out whether each group had made any progress as a direct result of instruction, within T-test group was computed for each group using the pre-test and post-test mean scores of each group.

(A) **Control Group paired sample t-test**

![Table No( 1)](image)

The above table provides the descriptive statistics for both variables. The mean, the number of observations, the standard deviation, and the standard error mean. The pre-test mean is higher: 5.1500 vs 4.9500. This means that the performance of the control group declined through the course instead of rising.

(B) **Experiment Group paired sample t-test**

![Table No 2](image)

The above table provides the descriptive statistics for both variables. The mean, the number of observations, the standard deviation, and the standard error mean. The post test mean is higher:
6.8000 vs 5.4000. This means that the performance of the experiment group improved significantly through the course.

**Table No 3:**

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>20000</td>
<td>95145</td>
<td>21275</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>24529</td>
<td>64592</td>
<td>940</td>
</tr>
<tr>
<td>Std. Error Mean</td>
<td>0.940</td>
<td>0.369</td>
<td></td>
</tr>
<tr>
<td>95% Confidence Interval of the Difference</td>
<td>Lower</td>
<td>Upper</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>19</td>
<td>369</td>
<td></td>
</tr>
</tbody>
</table>

**According to this table, t (19) = 0.940, P = 0.369.**

The table shows that the level of Sig. is 0.369 which is greater than 0.05. This indicates that there is strong evidence that the control group did not achieve any progress. On the contrary, it declined.

**Table No 4:**

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.45000</td>
<td>1.80283</td>
<td>35836</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>2.15005</td>
<td>0.64995</td>
<td>3.907</td>
</tr>
<tr>
<td>Std. Error Mean</td>
<td>0.001</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>95% Confidence Interval of the Difference</td>
<td>Lower</td>
<td>Upper</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>19</td>
<td>001</td>
<td></td>
</tr>
</tbody>
</table>

**According to this table, t (19) = -3.907, P = 0.001.**

The above table shows that the level of Sig. is 0.001 which is less than 0.05. This indicates that there is strong evidence that in the case of the experiment group there is a statistically significant difference. This means that the treatment has had a positive effect on the performance of the students. Through observations, we can state that the results within table 1 show that while all the classes improved, the results of the experimental group improved more than the control group. Both groups show improvements but the experimental group showed a marked improvement with the highest scores when compared to the slight improvements achieved by the control group. These results clearly illustrate the strongest evidence we have found in experiment, and supports our original hypothesis: “Argumentative essay strategies help English as a foreign language learners develop critical thinking skills.

**Results:**

This study has been conducted with the purpose of investigating whether the argumentative essay strategies develop EFL Learners critical thinking skills or not. At the end of the study the researcher has come up with the following findings:

Firstly; Third year students can achieve critical thinking skills through writing argumentative essay if they well trained and apply the strategies of writing argumentative essay properly.

Secondly: The period of 30 hours of instruction is quiet enough to teach this amount of course perfectly and train the students as well.

Thirdly: This study implication's is that strategies of argumentative essay can help students to become critical thinkers because the improvement was positive.
Recommendations:
1. Third year text books should include critical thinking lessons which can help them foster writing properly.
2. Writing sessions should be given sufficient time when it is accompanied by critical thinking modules.

CONCLUSION
This study tried to find out whether argumentative essay strategies develop EFL Learners critical thinking skills or not. As hypothesized: critical thinking strategies help EFL Learners develop critical thinking skills. The results of this study showed that EFL critical thinking skills within the experimental group improved significantly as a result of introducing argumentative essay strategies than in controlled group.

References:


