A Transformative Learning- Based Strategy for Developing Critical Reflection and Reflective Writing Skills of Secondary School EFL Students

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Abstract

The aim of the present study was to investigate the effectiveness of a strategy based on transformative learning in developing EFL critical reflection and reflective writing skills of secondary stage students. The problem of this study lies in second year secondary stage EFL students' poor level in critical reflection thinking and reflective writing skills. The study adopted the quasi – experimental design. The participants of this study were (60) female participants who were drawn randomly from 10th of Ramadan Language School at 10th of Ramadan City. They were divided into two groups (Control and Experimental) to determine the most required critical reflection and reflective writing skills to be developed through a strategy proposed called Transformative Learning. A critical reflection situational test and a reflective writing were developed by the researcher and approved by a jury in the field of TEFL. The tests were administered pre and post teaching the strategy proposed. Having collected the data, they were treated statistically. The results showed that there are statistically significant difference between the mean scores of the control and experimental groups on both tests in favor of the experimental one in critical reflection as well as reflective writing. So, it is recommended that the suggested strategy can be adopted by teachers in EFL contexts.
Introduction

The purpose of the current study was to investigate the effectiveness of using a suggested strategy based on transformative learning to develop critical reflection and reflective writing skills among secondary school EFL students. This chapter addresses the problem and its context.

Nowadays one of the primary objectives of schooling should involve the teaching tools for lifelong learning. Sellevaag (2004:3) states that when asking students what they think, they don’t know. They don’t seem to have been asked that question very frequently. So, empowering students with thinking skills is a fundamental necessity to achieve such an aim.

Therefore, there is an increasing emphasis, within undergraduate education, on the need for reflection as an integral part of learning to learn. We expect students to reflect as a part of their subject-based studies, but also to reflect on their learning and development of skills, (Lucas & Tan, 2006:3).

Because critical reflection draws upon higher order thinking skills and demands critical, analytical and evaluative thinking…..students needed access to language skills to interpret and make meaning of their classroom-based experiences and communicate this either during shared discussion or private written reflection,”(Kilborn, 2001). Teachers should, consequently, provide them with learning opportunities to develop such skills.

Talking about writing skills, Nezakatgoo (2010:231) believes that writing is the most difficult skill for EFL to master. Nevertheless, Greene (2011:90) assures that “structured opportunities for reflective writing allow students to polish their writing and to reflect actively on their written creations, while encouraging clear and honest writing products.” Looking back at an experience so as to learn from it and then move forward, is taken further by reflective writing through putting the reflection into the more permanent and structured format of a written account. So, reflective writing is not the formal use of writing to display memory and test mastery, but rather informal writing that helps learners
to acquire ownership of ideas presented to them. The idea of reflective writing is to prod learners into reflecting meta-cognitively on the material they encounter. Hence, reflective writing encourages learners to negotiate meaning and construct knowledge. (Kalman et al., 2008:75)

**Review of Literature**

**Transformative Learning**

Transformative learning is a term that originates from Transformative Learning Theory, which was first developed by Jack Mezirow in 1978. In that year he introduced the concept of transformative learning in his groundbreaking study of women who returned to community college to continue their education. As their understanding of personal, cultural, and social histories grew, so did the students’ ability to modify their assumptions and expectations of learning. In a subsequent series of publications (in 1990, 1991, 1995, 1997, 2000, 2003), Mezirow tried to explain transformative learning in light of psychoanalytical theory and critical social theory. He defines it as “the learning that transforms problematic frames – sets of fixed assumptions and expectations to make them more inclusive, discriminating, open, reflective, and emotionally able to change.” (2003:1). Mezirow (1996) believes that the aim of transformation theory is transformative learning which denotes that we learn from subjective interpretation of experiences and focuses on how we know in contrast to traditional learning that focuses on what we know.

Transformative learning is a theory about making meaning, not just about acquiring knowledge, and “[m]eaning is making sense of or giving coherence to our experiences” (Mezirow, 1991,p. 191). It is about taking ownership of one’s learning through critical reflection, rather than mindlessly or unquestioningly acquiring frames of reference through life experiences. Transformative learning, according to Mezirow, can be viewed as “an enhanced level of awareness of the context of one’s beliefs and feelings, a critique of one’s assumptions, and particularly premises, and an assessment of alternative perspectives” (1991, p. 191). More recently, Mezirow writes that “transformative learning is learning
that transforms problematic frames of reference-sets of fixed assumptions and expectations (habits of mind, meaning perspectives, mindsets) to make them more inclusive, discriminating, open, reflective, and emotionally able to change” (2003, p. 58). More simply put, transformative learning theory is about making sense of our experiences; it is a meaning-making activity.

Trying to find answers to the question “How does transformative learning occur?” Mezirow (2000) posits that all learning is change but not all change is transformation. Schols (2012) cites Mezirow’s (1991) explanation of how transformative learning begins “when we encounter experiences…that fail to fit our expectations and consequently lack meaning for us, or we encounter an anomaly that cannot be given coherence either by learning with existing schemes or by learning new schemes” (p.45) . Transformational learning occurs as we struggle to solve a problem where our usual ways of doing or seeing do not work and we are called to question the validity of what we think we know or critically examine the very premises of our perception of the problem’ (Eyler and Giles, 1999, p133)

For King and Biro (2006) transformative learning may start with a “disorienting dilemma” and progress through a dynamic pathway of stages; including personal questioning, deliberation, reexamination, new perspectives, trial stages, and final reintegration of a new frame

For Raiker (2012), transformative learning occurs when an individual understands opens up a new vista of interconnected learning. As an individual develops, s/he is increasingly able to solve abstract problems logically and to think critically of the self and others in moral, social, emotive and judgmental terms.

The phases of transformative learning according to Mezirow (1999) as cited in Whitney (2006) are: a disorienting dilemma; self-examination with feeling of guilt or shame; a critical assessment of assumption; recognition that one’s discontent and the process of transformation are shared and that others have negotiated a similar change; exploration of options for new roles, relationships, and actions; planning of a course of action; acquisition of knowledge and skills for
implementing one’s plans; previously trying out new roles; building of competence and self-confidence in new roles and relationships; and a reintegration into one’s life on the basis of conditions dictated by one’s new perspective.

Tackling the benefits of transformative learning, Mezirow (1997, 2000) believes that it encourages the development of greater autonomy as a person. He assures that "fostering greater autonomy in thinking is both a goal and a method for adult educators." Similarly, Ukpokodu (2007) assures that it empowers students to "become critical inquirers who confront their limiting and constraining beliefs, perspectives and frames of reference in order to foster the development of critical consciousness, vision of possibilities and actions." (p.320)

Long et al. (2012) investigated the effects of using a transformative learning framework on doctoral students' cognitive development. The results revealed that the participants saw themselves as becoming more perceptive, as thinking in more complex ways, being able to take multiple perspectives, and being better able to appreciate research and theory.

Deveci's (2014) study was conducted to investigate the transformative learning experiences of 32 EFL learners in the School of Languages in Turkey. The data were collected using a survey and a semi-structured interview. The results showed that most learners face various disorienting dilemmas causing their awareness to be raised in terms of language learning and culture knowledge.

To foster transformative learning among secondary vocational school students, Hodge (2010) used various activities as value dilemma, exercises, analyzing movies and documentaries, and reflection upon assumptions and values. All proved to be effective.

Educators, as believed by Curran and Murray (2008), should encourage learners to move beyond the relative safety of their own worldviews. They cite Taylor's belief that this process entails acknowledging the values, beliefs and feelings related to course content held by learners. The teacher's role also involves encouraging
questioning, risk taking, and tolerance of ambiguity. The teacher guides learners through a process of reflecting on life experiences, assumptions, and values. With each educational task, the teacher can ask the participants what they learned, how the process of learning affected them, and how the new learning changed their perspectives and assumptions. (Lawler, 1991).

Concerning the role of the learners, they share the responsibility for developing and maintaining an environment that supports conditions under which transformative learning can occur. Al Hadi (2010:34) assured that the pedagogic context for developing transformative learning could be considered from three dimensions: the participants, the instructor and the instructional situation itself. For the learners, “they should engage in group discussions where talk to others help work through beliefs and assumptions, where alternatives are seriously considered.”

Taylor (2007) sums up the results of some studies on transformative learning and claims that it is fostered by varied medium which include: learning experiences that are direct personally engaging and stimulate reflection upon experience, and the use of writing as a medium which provide a place for students to interject their own voice and a tangible product of the educational experience.

According to Jafari, et.al. (2013:1460) very few researchers seem to have turned their attention to transformative learning in the context of teaching English as a foreign language. So, it is important for language instruction to involve students in transformative learning experiences of critical reflective thinking and support them through language instruction that is compatible with transformative learning. (Deveci, 2014:4-5)

Critical reflection Review

For Lucas (2012), critical reflection is the ability to look beneath the surface to see what may influence the situation, resulting in critical depth to understanding. He adds, to examine the bigger picture and view the situation more holistically develops critical breadth. So, this deeper level focuses a learner’s attention on the root of the problem and transforms previously held perspectives of the same problem. That
enables learners to develop a fuller understanding of experiences, so they are better equipped to manage similar future situations (Thompson & Thompson, 2008).

Lo (2010) also tried to identify the themes in Asian EFL students' reflections and to understand whether their reflections are critical or not. The data were the reflections from 102 Taiwanese college students' portfolios. Each student was asked to reflect on English newspaper articles they chose. The themes emerged from the data were personal concerns or consequences, recognizing learned knowledge, connecting issues with contexts, presenting viewpoints, and making recommendations.

Tackling the levels of reflection, Grossman (2008) suggests four different levels of reflection along a depth continuum. These range from descriptive accounts, to different levels of mental processing, to transformative or intensive reflection. Also, Yesilbursa (2011) distinguishes similarly between descriptive reflection, which provides an account of events; dialogic reflection, which searches for reasons, provides alternatives and evaluates the result of learning; critical reflection, in which the larger socio-political context is taken into account.

Walton et al. (2001) cites Gibbs (1988) who assures that "It is not sufficient simply to have an experience in order to learn. Without reflecting upon this experience, it may quickly be forgotten, or its learning potential lost. It is from the feelings and thoughts emerging from this reflection that generalizations or concepts can be generated. And it is generalizations that allow new situations to be tackled effectively." (p.4)

Therefore, reflection is so significant as it, according to Moon (1991) encourages learners to consider the process of their own learning, critically review something, build theory from observations, engage in personal or self-development, and empower or emancipate themselves as individuals.

Smith (2011) assures that teaching new generations of critical reflectors will help to assure that the revolving door between knowledge
and uncertainty always remains open. Also, Bates et al. (2008) believe that individuals can frame problems, seek solutions, and evaluate their ideas through a lens of critically reflective thinking. Higgins (2011) states that critical reflection encourages students to be willing and able to question, explore, and critique ways of behaving and thinking as they engage in workplace experience and into the future.

The ability to reflect is not spontaneously and has to be consciously developed over time. In this context, Fowler (2007: 888) states that "reflection should not be seen as few 'add-on' paragraphs in which a few personal observations are made. Reflection should be an integrated, conscious process that involves deep thought processes."

In the EFL reflective classes, as Tarjana (2010) refers to, teachers and learners are encouraged to practice self-assessment and to discuss their perceptions, beliefs, and attitudes openly. They are engaged in active interactions, emphasizing on some ethics of caring, a creative problem-solving in a constructive dynamic learning atmosphere.

Describing good thinkers, Ping and Kee (2009) assure that good thinkers can express their ideas spontaneously, in greater depth, are more proficient in describing mechanisms and cause-effect relationships, linking phenomena to personal experience and asking questions that focus on expectations and causes.

Therefore, Ukpokodu (2007) believes that having a good command of language enables one to analyze, criticize, and advocate ideas more effectively; reason inductively; and infer from unambiguous statements of knowledge or beliefs. In the same context, Kilborn (2001) points out that "students need access to language skills to interpret and make meaning of their classroom-based experiences and communicate this either during shared discussion or private....reflection". (p.4)

Facilitating critical reflection among today's learners is a challenge. Kim et al. (2004) assured that individuals engage in critical reflection when they encounter problems with uncertain answers, when no authority figure has an answer, when they believe no one answer is correct, and when the solution cannot be derived by formal logic Fowler
(2007:888) states that “Reflection should not be seen as few ‘add-on’ paragraph in which a few personal observations are made. Reflection should be an integrated, almost subconscious process, which involves deep thought processes.”

In a recent study, Weshah (2012) aimed at measuring the effect of using problem-based learning (PBL) on reflective thinking development for tenth grade students in Jordan schools. The study sample consisted of 70 students divided randomly into two groups; experimental (36) and control (34) students. To collect the study data, the researcher used a reflective thinking test (RTT) to measure the effect of the instructional program on the experimental group. The results showed a positive effect of PBL as a significantly helpful strategy in promoting the students' reflective thinking.

Kazemi (2012) tried to examine the result of the process-based thinking model conducted in a workshop on the Comprehensive Reflective Thinking (CRT) of university students. The sample was comprised of students from the University of Sistan and Baluchistan (USB). The students of experimental group participated in a ten-session workshop. The instrument used for gathering the data was a Comprehensive Reflective Thinking Scales (CRTS). The results showed that the CRTS scores for the experimental group were significantly higher than the CRTS Score for the control group.

In 2009, Ping and Kee (2009) concluded that the learning environment that provide opportunities for negotiation, shared control, critical voice, personal relevance and uncertainty; and encourage language use in interacting, communicating and constructing meaning, is more effective in fostering higher order thinking. Moreover, Gustafson and Bennett (2002) point out that critical reflection requires spending significant time on one topic in order to explore it thoroughly. Students reflect on authentic materials they choose by themselves empowers their ability to critically reflect (Lo,2010). Also, King (2010) assured that key factors in improving the quality of students’ reflection
are time to reflect, reinforcement of the process and stages of reflection, an institutional culture of reflection and assessment.

**Reflective Writing**

Writing is an important skill that an individual has to learn and acquire in life in general and at school in particular. As stated by El-Deeb (2002:12), teaching writing has been shifted since 1970s. It was concerned by the products with the learner's answer. The focus was on accuracy of mechanics of writing (spelling, grammar, vocabulary and production marks). Since 1970, there has been a great interest in the process of writing.

"Writing makes our thought visible, laying it open for us to modify, extend, develop or critique" (Usher et al., 2001:16) Thus, reflection on the written words may promote distancing from the actual experience, hence, more objectively than speech (Wilson, 1996), as one carries on an "inner conversation" that is dynamic, complex, and enhances higher level thinking (Schmidt, 2004).

Spalding and Wilson (2002) used many strategies in their study to encourage reflective writing. Those strategies were:

a) reflecting on common incidents at school
b) peer sharing of journals
c) writing journals on e-mails or hard copy
d) teacher's feedback to students individually
e) having teacher mark type of reflection on journal
f) teacher's encouragement of students to be creative

Rooda and Nordi (1999) aimed at investigating the effects of using reflective writing assignments, by a sample of 21 faculty who taught in baccalaureate or associate of science (ASN) programs, on their students. The results clarified that students began to see written assignments not just as another paper, but as an opportunity to pull together concepts and synthesize content. Also, the faculty began to see students applying the nursing process in a much more holistic fashion, and integrating psychosocial assessments with their traditional medical-surgical interventions.
Barney and Mackinlay (2010) tried to explore how reflective writing can help students think critically about the complexities of researching and writing about Indigenous Australian Performance. The reflective journals of the students created a space for them to challenge their expectations and assumptions, question their understanding and rethink their initial reflections.

In his study, Sen (2010) concludes a positive relationship between reflective writing and a number of outcomes. These include: academic learning, the need for self-development, actual self-development, the ability for critical review, an awareness of one's own mental functions, support decision making and empowerment and emancipation.

**Relationship Between Transformative Learning, Critical Reflection and Reflective Writing**

Taylor (2001) assured that critical reflection enables learners to engage in transformative learning by engaging both reason and emotion, to understand their values, beliefs and biases, and to assess their learning so that their learning informs their practice. Because reflective writing includes a kind of analysis, which comes after the description of an event, this particular kind of analysis is what meant critical reflection. It always suggests self-analysis and self-assessment. This would never be done without experiencing a deep change of one’s styles of thought, feelings, and actions. Therefore, learners who are involved in transformative learning can express themselves reflectively in writing.

In 2015, Schoo et al.'s study aimed at finding out self-assessment motivational interviewing (MI) skills of health students and whether reflecting on the results can promote transformative learning. Thirty six students were taught the principles of MI, asked to conduct a motivational interview, transcribe it, and reflect on the experience. Results showed that students found MI challenging and lead them to transformative learning.

Learning English is not just memorizing grammar rules or acquiring a vocabulary, it involves representation of self and culture through language. Through transformative learning learners are involved
in a kind of discourse that enable them to use the language they learnt deeply and freely. Also, they go on what we call self-explanation to understand their past experiences and plan for future actions.

**Context of the Problem**

Generally, EFL learners have problems in their learning contexts, Cenoz (2009: 115) states that EFL students have very few opportunities to use English outside classroom. She also speaks about the lack of proficiency of the English teachers because of the lack of exposure: "Additionally, proficiency in English among secondary teachers…is not high, because English is not used in everyday life” (Cenoz, 2005:48)

In Egypt, English is taught in a typical foreign language situation where it is taught in formal school settings. Egyptian EFL classrooms are often crowded with students ranging in number from 40 to 70. These classes are mostly teacher-dominated and a learner-centered approach required by communicative classroom activities is not easy to implement. Moreover, most secondary school assignments require little writing; it is usually limited to a paragraph or two. The primary purpose of most secondary school writing tasks is content; students rarely write to entertain, inform or convince.

Mattar (1998:4) states that teachers, in Egypt, work in an exam-driven system. They aim at finishing the syllabus in a specified time. Limitations of time make them specify a few class period for writing exercises. They know nothing about what specifically to teach, what aspect to evaluate in students' performance, and care only about the final product which students do in their written work notebooks. Furthermore, the evaluation method they use needs reconsideration, as the teacher is the only source of feedback, mostly through the red marks which students do not often read.

Also, Abdel-Hack (2002: 193) stated that most ESL\EFL learners are unable to write adequately or to communicate through written work. Abel-Maksoud (2007) agreed with her and mentioned that large numbered classes make it difficult for students and the teacher to communicate in an authentic way.
According to El-Hadidy (2007), reflective thinking is very essential as it assists students to really interact with the texts and materials they are studying and this helps to better interact with the world around them and to become more self-aware. Vucko (2003) believes that researchers have uncovered a positive correlation between students' abilities to reflect on their learning and academic achievement.

In the Egyptian secondary school context, the currently adopted EFL textbook Hello! Series focuses on communication as its main target written by Don Dallas and associates. This series covers seven grades, from 4th primary to 2nd secondary with Hello 6 and 7 being used for both first and second year secondary. The aims of Hello 6 & 7, at the secondary school level, are building upon the language and skills presented at previous levels, encouraging the intellectual development of the students, and laying the foundation for students to be independent language learners. Having used textbooks, the language skills required of the secondary students include, reading the English language with understanding and critical judgment, writing clearly on various topics, listening and speaking well, especially in structured situations, developing an understanding of the structure of the English language, and promoting study skills for further study (Allen and Iggulden, 1999; 2000)

The problem of the study is supported by reviewing previous studies which were concerned with the development of critical reflection and reflective writing skills, especially in Egypt. To the researcher's knowledge, there are a few researches (e.g., Al Hadi, 2010; Al-Sheikh 2000; El-Sweedy, 2007 and Rashed, 2003) done to develop critical reflection skills. In addition, there is a scarce body of research done to improve high order writing skills and enhance writing reflectively among secondary school EFL students in Egypt. Therefore, more work and research are needed as recommended by (Abdel-Hack and Helwa, 2014; Aly, 2002; El-Marsafy, 2004; Gaber, 2003 and Khater, 2002).

Also, evidence of the problem was identified through the following:

1- Examining a random sample of some second year secondary EFL students' written products from two different experimental schools. The type of their written work was seen as a descriptive one.
2- Attending some classes and observing some teachers' way of teaching, they tended to read the text in the set book, then answer the questions orally with the students, and ask them to memorize the questions and answers.

3- Analyzing the English language teaching directives for the secondary level. They do not include any aims related to critical reflection thinking skills or reflective writing skills.

4- Conducting an unstructured interview with some TEFL methodologists. They emphasized the necessity of developing critical reflection and reflective writing skills among secondary school EFL students.

5- Reviewing some related literature and previous studies that clarified the lack of critical reflection skills and reflective writing skills among school learners (e.g., Cheung, 2009; Herrington & Hathaway, 1994; Holt, 2006; Kilborn, 2001; Pratt & Nestat, 2000; Ryan, 2001; and Ziegahn 2005)

**Statement of the Problem**

In the light of the background set above, the problem of the present study could be stated as follows:

There is a low level of critical reflection and reflective writing skills among second-year secondary EFL students, so this may lead them to be poor thinkers and poor writers.

The present study is an attempt to investigate the use of a transformative learning based strategy for developing critical reflection and reflective writing skills of secondary school EFL students.

**Questions of the Study:**

The problem of the study could be formulated in the following questions:

1- What are the critical reflection and reflective writing skills required by second year secondary school EFL students?

2- To what extent do second year secondary school EFL students master critical reflection and reflective writing skills?
3- What are the features of a strategy based on transformative learning that may help to critical reflection and reflective writing skills?

4- How effective is a transformative learning-based strategy for developing second year secondary school EFL students’ critical reflection?

5- How effective is a transformative learning-based strategy for developing second year secondary school EFL students’ reflective writing?

6- What is the relationship between critical reflection and reflective writing skills acquired by second year secondary school EFL students?

**Hypotheses of the Study**

The hypotheses of this study were as follows:

1- There would be a statistically significant difference in the critical reflection mean scores results of the experimental group pre and post the proposed strategy intervention in favor of the post-test mean scores.

2- There would be a statistically significant difference in critical reflection mean scores between the experimental and the control group in the post-test results in favor of the mean scores of the experimental group.

3- There would be a statistically significant difference in the reflective writing mean scores results of the experimental group pre and post the proposed strategy intervention in favor of the post-test mean scores.

4- There would be a statistically significant difference in reflective writing mean scores between the experimental and the control group in the post-test results in favor of the mean scores of the experimental group.
Significance of the study

For second year secondary school EFL students:

a) Helping students to be aware of their critical reflection and reflective writing skills.
b) Developing their critical reflection skills.
c) Developing their reflective writing skills.
d) Encouraging students to use higher-order thinking skills.

For EFL teachers:

a) Raising their awareness of the importance of transformative learning for developing critical reflective thinking and reflective writing skills among their students.

For EFL curricula designers:

a) Raising their awareness of the importance of transformation in the curriculum.
b) Providing them with a strategy that may develop two aspects of language at the same time, critical reflection and reflective writing skills, to be injected in English courses for secondary school students.
c) Providing them with two lists of critical reflection and reflective writing skills upon which they can design other strategies and programs for developing these skills.

Definition of the Study Terms

a) Transformative learning

Mezirow(1996:162) defines transformative learning as “the process of using a prior interpretation to construe a new or revised interpretation of the meaning of one’s experience in order to guide future action “

The present study identifies transformative learning as "the process of refining one's previous background knowledge and reconsidering past experiences to be used for future action."
b) Critical reflection

For Lucas (2012: 2) critical reflection is "the ability to look beneath the surface to see what may influence the situation, resulting in critical depth to understanding".

The present study defines critical reflection as "the means by which we identify and validate the reasons behind our feelings and actions."

c) Reflective writing

Liu (2003:12) defines reflective writing as "writing in which students reflect on their effort, progress and multiple written products."

The present study defines reflective writing as "the ability to express feelings and ideas in a reflective way and analyze an event or experience in different written contexts."

Study Sample

This study adopts the quasi-experimental method. Two groups of second year secondary EFL students at a government school (the 10th of Ramadan Language School) were randomly drawn to represent a control group (N=30) and an experimental one (N=30).

Instruments of the Study

The current study made use of the following instruments in order to fulfill its purpose:

- A critical reflection skills (CRS) test with a rubric to be used as a rating scale.
- A reflective writing skills (RWS) test with a rubric to be used for rating.

The CRS test Validity

The test was submitted to a group of TEFL jury members to validate the test in term of: (a) the suitability of the situations to measure the intended critical reflection skills; (b) the suitability of the test to assess second year secondary stage EFL students' critical reflection; (c) the difficulty and length of the situations for the participants'
background knowledge; (d) the clarity of the test instructions. Taking into consideration the jury members' suggestions, the final form of the test was modified and formulated.

**The CRS test Reliability**

The reliability of the test was calculated by Cronbach's Alpha formula. After statistical calculation, it was found 0.956 which means that the test is highly reliable. This indicates the high internal coherence of the test.

**The RWST Validity**

The test was submitted to a group of jury members to validate the test in term of: (a) the suitability of the topic to measure the intended reflective writing skills; (b) the suitability of the test to assess second year secondary stage EFL students' reflective writing; (c) the challenge of the topic for EFL second year secondary stage students' background knowledge; (d) the clarity of test instructions.

**The RWST Reliability**

The reliability of the test was calculated by Cronbach's Alpha formula. After statistical calculation, it was found 0.927 which means that the test is highly reliable. This indicates the high internal coherence of the test.

**The Transformative Learning Strategy (TLS)**

The suggested strategy based on transformative learning was designed to develop EFL critical reflection and reflective writing skills of second year secondary school stage students.

**a) Objectives of the TLS**

By the end of the experimental work, the students would be able to:

1- Develop their ability to think reflectively.

2- Write reflectively in English as a result of developing their reflection skills.
b) The basics of the TLS

To find out what those basics are, the researcher reviewed some literature and previous studies that were concerned with transformative learning techniques and activities. Bearing in mind all the information obtained from those sources; she took into consideration the following:

1- Learners experience personal and intellectual growth,
2- Transformative learning strategy is a discovery teaching strategy,
3- Transformative learning can be the result of an educational experience,
4- Through the chosen themes, the researcher aims at giving the students opportunities to revisit their personal experiences,
5- Transformative learning is the process of encouraging students to change from being receptacles of knowledge to more meaning but learning through considering different viewpoints and questioning their own beliefs, values and assumptions,
6- Engaging in critical reflection is basic condition for transformative learning,
7- Classroom climate is the key to fostering perspective transformation, and
8- Transformative learning experience should be conducted through different conditions and processes:
   ▪ There must be an activating event.
   ▪ The students need to practice critical self-reflection,
   ▪ The students need to be able to go into group discussion, and
   ▪ The students can then apply new perspectives they have gained through the experiences.

C) The Duration of Application of the TLS

The experiment lasted eight weeks in the second semester of the academic year 2014/2015 from the 25th of February to the 20th of April consisting of seventeen sessions.

Materials for the TSL

The instructional materials for the strategy consisted of six reading passages. Those passages were taken from the Student's book
(Hello!7). They were taught to the experimental group using the TLS and to the control group using the regular method.

**Description of the TLS**

The strategy consisted of two parts: a) Induction and Introduction sessions and b) Transforming learning sessions.

**a) Introduction Sessions**

In the first session, as transformative learning was a novelty for all the students involved, it was important to try to prepare them emotionally and mentally for the tasks ahead. To do so, the instructor tried to create a friendly and relaxed environment by introducing herself simply and, showing the students a PowerPoint presentation, giving a theoretical background about transformative learning (What is transformative learning? What is its goal? What is a frame of reference? What is the theory of transformative learning? What is perspective transformation? What are the stages of transformative learning? What are the suggested stages of the TLS?

Then, in the second session, the instructor clarified what critical reflection means; what are the sources of reflection? What are the critical reflective thinking skills?

After that, in the third session, the instructor explained the meaning of reflective writing, showed the students some written examples of reflective writing, and directed them on how to use some reflective phrases in their written products through the application of the strategy.

**b) Transformative Learning Sessions**

As the main objective of the suggested TLS sessions was to improve critical reflection and reflective writing skills, each lesson included two sessions, they were administrated as follows: 

**Session one** included:

1- Warming up: students are shown a picture, asked some oral questions and encouraged to predict the topic under discussion. 
2- Triggering event: students are presented with power point presentation; consisting of single words and single images that related to the topic, then asked to write individually stream-of-
conscious-worksheet (as they write whatever comes to their mind when seeing the slides. Then, following the visual presentation, the instructor and her students discuss orally all the responses focusing on each student's viewpoint, thoughts, and background knowledge related to the topic.

After that, students are asked to write in their journal any life personal story (the story may be real or an imaginative one) they had related to the topic and be delivered before the next session. While writing students should consider the elements of a story (the setting, initiating event, internal response, attempt, consequence, and reaction). Also, the instructor gives direct clear instructions for the structure of the story. The story should be well organized and include the following pattern:

1- **Setting**: It introduces the main characters and the initial situation of the story.

2- **Conflict**: It presents some kind of problem or a goal to reach and the tension about it.

3- **Resolution**: It is the end of the story and presents a solution to the conflict.

Before reading, students are asked to use their dictionaries to look up the meanings of the new words included in the text in their book, using graphic organizers. After that, students in pairs try to consider each other's perspectives. Each pair would complete a figure. Doing so, they find out the similarities and differences in perspectives between each other. Students, in groups, read the written text in their notebooks. Now students can pause and consider what differs from their own way of thinking. They would realize that there are other voices considering the topic, not only their own or their peers.

After reading, students are asked to adopt one perspective (for or against) and engage in dialogic viewing circles to discuss and analyze the new perspectives. Moreover, other groups should prepare questions and arguments to clarify the weaknesses of others' perspective. Finishing the previous discussion, each group is asked some questions. For the
next session, students are asked to design a poster reflecting their position on the topic (for or against) and the evidence supporting it. Also, they are asked to write two entries in their journal; one to express their impressions about the session, what they liked, what they did not like and what they suggest to improve it. The other entry to mention the most important lesson learnt and the best things they discovered about the topic. They would be given some questions to be considered while writing.

**Session two included:**

1- personal critical reflection: students read one or two of their personal stories and share the comments and feedback (given by the instructor) with the whole class. Then, groups in turn, are given 7 minutes for each one to present their posters. All the students are to answer some questions, after considering the posters. The instructor and her students discuss orally all the responses focusing on the changes in perspectives that students have had and the reasons that lead to such changes.

2- discourse with others: Here, the students are asked to use their Twitter or Facebook accounts to exchange assumptions with each other on a viewpoint, share their triggering event, or probe deeper about why they thought the way they did and how they may be changing their assumptions. Moreover, they may write their reflections on any of the stories told by other classmates.

3- action: Here, students are asked to work in their groups to solve a problematic situation using their new transformed perspectives. Their suggested solutions would reflect whether their perspectives have been transformed, confirmed or remained as they are: unjustified or unquestioned.

**Assessment Methods**

There were two methods of assessment used:

1. **Formative assessment:**

   It was an on-going assessment process during the sessions. It was represented in the continuous monitoring and feedback the instructor
gave to the participants on every task throughout the implementation of the suggested strategy.

2. Summative Evaluation:

   It was another method of assessment that was used at the end of the strategy in order to evaluate the effectiveness of the proposed strategy in achieving its goals. That summative evaluation took the form of post administration of the critical reflection thinking and reflective writing tests on the control group and experimental groups after implementing the strategy.

Results and discussion

The participants' scores on the pre- and post-tests were statistically analyzed using the SPSS program, in order to identify the effect of the transformative learning-based strategy on the development of the participants' critical reflection and reflective writing skills.

Hypothesis (1)

To test the hypothesis that says "There is a statistically significant difference in the critical reflection scores results of the experimental group in favor of the post-test scores, t-test paired sample was used, i.e., to investigate the difference between the mean scores on the critical reflection skills test of pre-post-administration of the strategy. Table 1 shows the results.

<table>
<thead>
<tr>
<th>Skills</th>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>D.F</th>
<th>t-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical reflection</td>
<td>Pre</td>
<td>30</td>
<td>7.80</td>
<td>2.87</td>
<td>29</td>
<td>8.719</td>
<td>0.00**</td>
</tr>
<tr>
<td>skills (total)</td>
<td>Post</td>
<td>30</td>
<td>20.37</td>
<td>8.47</td>
<td>29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Significant at (0.01) level**

Table 1 shows that there is a statistically significant difference at (0.01) level between the mean scores of pre and post critical reflection skills tests of the experimental group in favor of post – test scores. This difference proves that the critical reflection skills of the participants in the experimental work have been improved. This assures the positive
effect of the TLS on developing their critical reflection skills. So, the first hypothesis of this study is supported.

The previously mentioned result indicates that through the use of the present TLS, the participants were exposed to different kinds of listening and reading activities from different perspectives, experiences, videos, and asking challenging questions that lead to promoting critical reflection thinking. Also, according to TLS the classroom is a learner-centered one where work sheets and personal journals considered the basis for dialogue and team work and these may be key factors in developing students critical reflection thinking.

Moreover, that result may be due to the fact that the environment of the present study encouraged a new way of making meaning of language knowledge in a way that the participants did not passively accept and believe what they were told or what they read or listened to, but rather engaged in oral activities such as critical viewing circles, discussion and critical questioning of the content they study.

In another way, the results can be attributed to the fact that the present study followed certain stages based on transformative learning which helped students to challenge some of their firmly held ideas, change their normal way of doing things and discover faults in what they previously believed to be right.

These results are in line with the results of the studies of Long and et.al. (2010), Brigham (2011), Deveci (2014), Long et al. (2010), and Schoo et al.(2015) as they all assure the importance of using transformative learning on improving high thinking skills.

**Hypothesis (2)**

The second hypothesis which presupposed that "There is a statistically significant difference in critical reflection scores between the experimental and the control group in the post-test results in favor of the scores of the experimental group. ", was tested according to the measures required. The following table shows the t-test results concerning this hypothesis.
Table (2)

Comparison of the Experimental and Control Groups' Total Mean Scores on Critical Reflection Skills Post-Test.

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>D.F</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Reflection Skills (total)</td>
<td>Experimental</td>
<td>30</td>
<td>20.37</td>
<td>8.47</td>
<td>58</td>
<td>7.519</td>
<td>0.00**</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>30</td>
<td>8.20</td>
<td>2.62</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (2) shows that there is a statistically significant difference at (0.01) level between the mean scores of the experimental and control groups on the post critical reflection skills test in favor of the scores of the experimental group. This difference proves that the critical reflection skills of the experimental group who participated in the experimental work have been improved while the control group who didn't participate in the same work has not been improved. Therefore, the second hypothesis of this study is supported.

These results may be due to the following reasons:

1- The TLS used in the present study encouraged collaborative thinking as each participant discussed her perspectives in a group. In group discussions, there was no opinion suppression. The participants listened to different opinions and perspectives, and therefore, they were free to express their own opinions and their ability to think reflectively. They transformed into reflective, critical thinkers who are open to other perspectives and accepting new ideas.

2- The instructor’s role was a facilitator and a provocateur. She helped the participants to learn, to listen to each other, to respect and assist each other. She also sometimes modeled the critically reflective role expected of the participants. Also, she, as an agitator, guided their thinking by asking thoughtful questions such as "What do you think?" and "What are your reasons?". This role could stimulate their critical reflection thinking that encouraged them to explore and reflect on issues and ideas in the texts presented to them. This ultimately improved their critical reflection thinking skills.
3- The use of online discussion (on Facebook) provided an opportunity for the participants to continue, provided an opportunity for students to continue challenging assumptions and considering new perspectives.

4- The topics and content material, chosen by the researcher, used in the present study was of argumentative nature, that led the participants to analyze, reflect and criticize their prior knowledge and rethink of their taken-for-granted perspectives.

5- The learning tasks used through the TLS tested the participants' existing perspectives and expectations through reflective discussion and reasoning that challenged them to change their perspectives. Their new perspectives were more inclusive, open and reflective, and acceptable to their classmates.

These results are in accordance with the results of El-Sweedy (2007), Gluscinksi (2007), King and Wright (2003), Tisdell and Tolliver (2003), who proved that using transformative learning succeeded in developing learners' critical reflection skills.

**Hypothesis (3)**

The third hypothesis which presupposed that "There is a statistically significant difference in the reflective writing mean scores of the experimental group in favor of the post-test scores," was tested by calculating the means, standard derivation, and t-test. The following are the results of the t-test for paired sample comparing the mean of the participants’ scores on the total of their reflective writing skills, before and after administration of the strategy.

**Table (3)**

Comparison of the Experimental Group's Total Mean Scores on Pre and Post Reflective Writing Skills Test.

<table>
<thead>
<tr>
<th>Skills</th>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>D.F</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflective writing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>skills (total)</td>
<td>Pre</td>
<td>30</td>
<td>3.00</td>
<td>1.58</td>
<td>29</td>
<td>18.66</td>
<td>0.00**</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>30</td>
<td>11.57</td>
<td>3.29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

0.00**significant at (0.01) level
Table 3 shows that there is a statistically significant difference at (0.01) level between the mean scores of pre- and post- reflective writing tests of the experimental group in favor of the post–test. This difference proves that the reflective writing skills of the sample who participated in the experimental work have been improved. This assures the positive effect of the (TLS) on developing their reflective writing skills. So, the third hypothesis of this study is supported.

These results may due to the fact that implementing reflective journal writing technique in the present study, encouraged the participants to gain insights of their own strengths and weaknesses as learners. Also, they were more able to make suggestions for overcoming their learning difficulties. Moreover, they found in it a personal space for them to keep records of their own ideas and thoughts.

In addition, the use of storytelling technique enabled the participants to communicate thoughts and feelings, listen to each other, improve their writing skills in general, be active participants, acquire certain language items, follow meaning and predict language.

Moreover, the instructor's comments and feedback on the participants' written works guided them in writing and encouraged them to write with no fear of grading or direct correction.

It is worth mentioning that, the previous mentioned results are in line with those of Fernandez et al.(2015), Kennson (2012), Sen (2010), and Spalding and Wilson (2002) who concluded the importance of reflective writing skills improvement.

**Hypothesis (4)**

To test Hypothesis (4) which states that "There is a statistically significant difference in reflective writing scores between the experimental and the control group in the post-test results in favor of the mean scores of the experimental group." , the required measures were carried out. The following table shows the results of the t-test concerning this hypothesis.
Table (4)

Comparison of the Experimental and Control Groups' Total Mean Scores on Reflective Writing Skills post – Test

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>D.F</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflective writing Skills (total)</td>
<td>Experimental</td>
<td>30</td>
<td>11.57</td>
<td>3.29</td>
<td>58</td>
<td>12.456</td>
<td>0.00**</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>30</td>
<td>3.50</td>
<td>1.33</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**significant at (0.01) level

Table 4 shows that there is a statistically significant difference at (0.01) level between the mean scores of the experimental and control groups on the post reflective writing skills test in favor of the mean scores of the experimental group. This difference proves that the reflection writing skills of the experimental group who engaged in the experimental work have been improved while the control group who did not engage in the same work have not been improved. Therefore, the fourth hypothesis of this study is supported.

These results revealed that using different techniques of writing along with classroom discussion, used throughout the suggested strategy, helped the participants to develop their ability to express themselves freely and to build and refine their ideas and opinions. Knowing that the purpose of the instructor's comments and feedback was not for correcting mistakes, motivated them more and reduced the fear they felt at the beginning of the experimental work.

These results are in line with those of Barney and McKinley (2010), Komara (2007), and Yesilbursa (2011) who proved that using techniques that encourage reflection improved the participants' reflective writing skills. Also, the instructor's written feedback and targeted comments on the participants’ reflective writing pieces encouraged further writing and exploration of topics.

Conclusions

In light of the delimitations as well as the findings of the study, the researcher concluded that: (1) the study participants showed a great development in EFL critical reflection skills with its main and sub skills as well as reflective writing skills with its sub skills. Accordingly, it can
be concluded that the transformative learning strategy was found to be effective in developing critical reflection and reflective writing skills of second year secondary school EFL students.

Before the implementation of the transformative learning strategy, most of the students were found to be poor thinkers and writers, and they were unable to rethink of their knowledge, beliefs, or perspectives. Through the use of the TLS, the study sample (experimental group) showed improvement of their skills to reflect, orally and in a written form, on their own learning as well as on their experiences. Moreover, they could benefit from the instructor's continuous feedback to enhance their skills to analyze, react, reconsider, and requisition their thoughts, feelings, and beliefs. That is to assure the effectiveness of transformative learning in developing second year secondary school EFL students' critical reflection and reflective writing skills.

**Recommendations**

In light of the findings of the study, the researcher recommended that: (1) EFL students' critical reflection skills and reflective writing skills should be emphasized and developed through the use of the TLS; (2) For the TLS to be effective, the teacher should encourage students' participation, engage them in discussing, analyzing, rethinking of what they listen to or read and lead them to predict the future and take actions based on their new experience; (3) EFL students should be given current issues that related to their ages, needs, interests, and prior knowledge; (4) EFL teachers should be trained on how to use and apply TLS for their students in classes; (5) The TLS should be used for teaching critical reflection thinking and reflective writing skills from the outset of instruction; (6) Success with the TLS does not come immediately, but any instructor, who wishes students to be critically reflective thinkers and good writer, should do his best to achieve this goal.
Suggestions for Further Research

The results of this study supported the need for further research in this area. Therefore, the researcher would like to suggest the following:

1- Further studies should be conducted to investigate the effect of using the TLS on EFL other language skills.

2- Further studies should be conducted to investigate the effect of the TLS on EFL students' attitudes towards English language.

3- Further studies should be conducted to investigate the relationship between critical reflection thinking and reading comprehension skills.

4- Further studies should be conducted to investigate the different kinds of reflection shown in the written works of secondary school students.

5- Further studies should be done to investigate the use of TLS with university students.

6- Further studies should be done to examine the effect of the integration between other types of learning and transformative learning on EFL classes.
References


King, T. (2010). *Development of student skills in reflective writing*. Available from: Personal – mail: terry-king @ port.ac.uk


