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**Using a Situated Learning –based Strategy to
Develop Some Critical Thinking Skills and Enhance
English Language Learning Interest at Preparatory
Stage Pupils**

BY

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Abstract

The research aimed at investigating the effect of using a situated learning –based strategy to develop some critical thinking skills and enhance English language learning interest at preparatory stage pupils. The research employed a one group pre-posttest design. Subjects were (30) female second year preparatory school pupils at Assuit City. The experiment lasted for one academic semester. Tools of the research included: (1) a situated learning- based strategy guide, (2) a critical thinking skills checklist, (3) a critical thinking sub-skills test and (4) an English language learning interest questionnaire. Paired Samples t test was used to reveal significance of differences between means of scores of the study group in the pre and the post implementation of the Critical Thinking Sub- Skills Test and the English Language Learning Interest Questionnaire. Analysis of data indicated significantly better post gains. The research concluded that the proposed situated learning- based strategy guide had a positive effect in developing critical thinking skills and enhancing English language learning interest at preparatory stage pupils.

Key Words: Situated Learning Strategy- Critical Thinking Skills- English Language Learning Interest

استخدام استراتيجيه قائمه علي التعلم الموقفي لتنمية بعض مهارات التفكير الناقد وتحسين الميل نحو تعلم اللغة الانجليزية لدي تلاميذ المرحلة الاعداديه

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ملخص البحث

استهدف البحث الحالي استكشاف اثر استخدام استراتيجيه قائمه علي التعلم الموقفي في تنمية بعض مهارات التفكير الناقد وتحسين الميل نحو تعلم اللغة الانجليزية لدي تلاميذ المرحلة الاعداديه. تبني البحث الحالي تصميم المجموعة الواحدة ذات الاختبار القبلي والبعدي. اشتملت مجموعة البحث علي (٣٠) تلميذه بالصف الثاني الاعدادي مدرسة عصمت عفيفي بمدينة أسيوط. تمثلت أدوات البحث في: (١) دليل استخدام إستراتيجية التدريس القائمة على التعلم الموقفي، (٢) قائمه بمهارات التفكير الناقد، (٣) اختبار مهارات التفكير الناقد، (٤) استبيان الميل نحو تعلم اللغة الانجليزية. استغرق تطبيق البحث فصلا دراسيا كاملا. تم استخدام اختبار "ت" للعينات المرتبطة وذلك للكشف عن دلالة الفروق بين متوسطي درجات مجموعة الدراسة في القياسين القبلي والبعدي لاختبار مهارات التفكير الناقد واستبيان الميل نحو تعلم اللغة الانجليزية. وقد أظهرت النتائج وجود تحسن فالقياس البعدي لأداء التلاميذ مجموعة البحث في اختبار مهارات التفكير الناقد واستبيان الميل نحو تعلم اللغة الانجليزية. لخص البحث إلى أن استخدام استراتيجيه قائمه علي التعلم الموقفي له تأثير ايجابي علي تنمية بعض مهارات التفكير الناقد وتحسين الميل نحو تعلم اللغة الانجليزية لدي تلاميذ المرحلة الاعداديه.

الكلمات المفتاحية: استراتيجيه التعلم الموقفي- مهارات التفكير الناقد- الميل نحو تعلم

اللغة الانجليزية

Introduction:

Formal education treats knowledge as independent and decontextualized of the situations in which it is learned or used. The main purpose of the school is to impart theoretical knowledge which often includes notional and formal concepts. The segregation of what is learned from how it is learned and used has been discussed by many researchers who reported that in real life, experts and practitioners treat and use skills and knowledge in a completely different way from that takes place at the educational settings (Catalano, 2015). Consequently, a great number of students face problems in using knowledge and skills learned in formal settings or at work place, outside school. Knowledge learnt in the school setting that is usually memorized, tested, and forgotten afterwards, is less valuable than that learnt in everyday life outside school. Instructions provided in contextually meaningful learning environments might be more applicable and comprehensible in authentic situations (Kim, 2012). Brown et al., (1989) claimed that knowledge is linked to the activity, context, and culture where it is learned.

Teaching abstract, out of context contents will simply lead learners to impart inert knowledge but not to use it for solving problems faced in realistic situations. It is agreed that knowledge is located in the activities learners perform and that it develops over time as they take part in such activities. Teaching method is one of the essential elements that helps students acquire knowledge and learn how to transfer, share, and disseminate it in different contexts. As different teaching methods have varied powerful effects on students' learning, teachers should use suitable ones to help his/her students get expected and desired gains because traditional teaching methods might fail to meet learners' additional requests. (Unal & Inan, 2010). Choi and Hannafin (1995) maintained that teachers often "teach to the test" (p.63) They affirmed that the types and nature of test questions affect both learning and instructional processes. and that as students realize that they are being tested for their ability to remember the information presented by the teacher, they start to retain it which leads to de-contextualization of their knowledge and moreover makes learning to be only learning for the test (Altalib, 2002).

Learners need to acquire pertinent knowledge and also to use that knowledge and skills when acting in real contexts. Therefore, employed teaching strategies together with the context used for teaching a specific

content should allow students to solve practical problems and to transfer skills to work situations. One of the knowledge acquisition perspectives that supports this viewpoint is situated learning which calls for reducing differences between learning a content in a formal instruction classroom environment and the application of knowledge and skills in real life environment (Ling & Choo, 2005).

To situate means to determine the thinking and doing processes experts used to accomplish knowledge and skill tasks (Lave & Wenger, 1991). It means to establish the conditions in which participants experience the complication and vagueness of learning in the real world. Participants create their own knowledge throughout their relationships with other learners, the activities, environmental surroundings as well as the social organization that society promotes and maintains (Stein, 1998).

According to learning theories viewpoint, the term “situated” used to mean positional, and “situated learning” refers to learning that is placed in a context, indicating that information becomes meaningful if only presented in relation to its’ context (Bredo, 1994; Clancey, 1992; Hung, 2002). This viewpoint stresses knowledge contextual dimensions and considers meanings to be closely related to situations and actions. Hung (2002) stressed the idea that knowledge does not only exist in the learners’ mind but also it is mainly a production of the mind and world. Conceptual knowledge is reached when an individual interacts with the environment and thus understanding of meaning occurs (Goodson-Espy et al., 2002). Thus, knowledge is positioned in relation to status between oneself and others in the world and what is learned cannot be separated from how it is learned (Brown, et al., 1996). Knowledge is affected by the activity, context, and culture wherein it is used. This implies that without active explanation and participation in the situation, mental models will not be created in the learners’ mind as well as generalization in learning will not take place. Thus, learning becomes meaningful and makes sense if learners actively participated in the learning process and when learning takes place within authentic situations, contexts or activities (Wells, 1999).

Situated learning theory fosters authentic learning. In a situated learning environment, the learning of skills and knowledge takes place in contexts that convey how that knowledge is obtained and put into use in everyday situations. What is learned cannot be detached from the context in which it is learnt or used as it becomes an essential part of it.

Situations are believed to generate knowledge through collaboration and activity as learning and cognition are basically situated (D, Souza & Clare, 2018). Situated learning theory thinks of learning as a socio-cultural phenomenon and calls for using collaborative teaching methods as a means of acquiring knowledge because knowledge is created out of interaction that takes place between learners with each other or with the environment (Krishner & Whitson, 1997). According to Vygotsky's sociocultural theory, social interaction has a major role in developing cognition as individual's cognitive development cannot be understood without relating it to the situation in which an individual is situated (D, Souza & Clare, 2018).

In a similar vein, Mclellan (1996) maintained, situated learning stresses the significance of learning in real life contexts as knowledge is constructed when the learner is engaged in solving authentic unscheduled complicated problems that they would probably face. Learning in the classroom is completely different from learning in a natural environment where individuals are provided with real contexts and authentic tasks, use constructed knowledge, and apply it to new situations to accomplish these tasks.

The main connotation of situated learning is that all learning happens in a specified context which significantly affects it (Alessi & Trollip, 2001). Duffy and Cunningham, (1996) maintained that if learning is removed from its context, the importance of knowledge together with its relevance to the learner will be reduced. In a similar vein, Contu and Willmott (2003) stressed that learning should be situated within daily work practices. They shared the view that situated learning focuses less on cognition that takes place in the individual's mind and concentrates more on the learners' practices.

In situated learning environments, students have the chance to observe a task before being applied in real context that is referred to as access to an expert performance and modeling of process. Learners are also provided with collaborative activities which support collaborative construction of knowledge, higher order thinking skills, together with reflection processes that enable them to generalize, articulate, negotiate, and defend their knowledge (Ozudogru & Ozudogru, 2017). Lu (2019) stressed that situated learning environments put students in authentic learning situations which replicate real world's situations where they act using critical thinking skills. Actively engaging students in collaborative

activities and modeling the thinking process together with using effective questioning techniques and guiding students' critical thinking process by instructors, can encourage students to develop their critical thinking skills (Snyder & Snyder, 2008).

Learning is a social process that depends on dealing with others situated in a context that mostly looks like the practice environment (Lave & Wenger, 1991:35). Chou (2014) stated that situated learning stresses cooperation and participation as a way for acquiring knowledge and that knowledge is negotiated through learners' interaction with each other and with the environment. Learning is implied in the experience than in the subject matter organized by the instructor. Situated learning is thus a useful model for teachers and educationalists calling for a communication atmosphere to make language teaching more effective since this model stresses the importance of acquiring and processing knowledge in real setting (Efe et al., 2011).

In the field of teaching English as a second/ foreign language, the educational system currently focuses more on developing students' language skills throughout transmitting knowledge and administering tests only while slightly focuses on developing learners' critical thinking ability. However, in order to achieve better quality in education, it is extremely important that teachers develop their students' critical thinking skills besides the language skills (Fachraini & Sartika, 2019). In the educational process, thinking skills are very essential since students' way of thinking influences their ability and efficiency in learning. Hence, it is necessary that teachers bring together thinking skills and learning processes to provide students with both knowledge and skills to help them get ready to apply new information or knowledge in solving problems they might encounter in new situations.

Critical thinking is extremely important to learning. There are two stages for learning a content. The first stage is known as internalization and takes place when learners, for the first time, in their minds, build basic ideas, principles and theories that are deeply rooted in the content. The second stage is referred to as the application process where learners move to use those ideas, principles and theories as they become pertinent to their lives. Hence, teachers should foster their students' critical thinking and reflectiveness through focusing the teaching and learning activities on stimulating learners' minds to master key concepts, principles and generalizations implied in the subject matter which is

necessary for the construction of knowledge (Adenyemi, 2012). Providing students with critical thinking activities and exercises guides them to adopt a scientific attitude when solving problems during their classes or in real life settings (Setyowati, et al., 2018).

Critical thinking is a basic ability that needs to be trained and developed by teachers. Improving students' critical thinking ability can be achieved through using a good learning process where students are actively involved in the classroom. This requires improving the quality of learning through using good teaching materials that enable learners to get information not only from lecturers but also from performed activities and actions in order to improve their critical thinking skills and thus achieve better learning outcomes (Setyowati, et al., 2018).

Harizai and Hajrulla (2017) stressed that developing critical thinking skills nowadays is the task of the teacher and that critical thinking skills help students to make reflections, become creative, autonomous and self-trusting learners. They added that teachers need to use suitable teaching strategies to help their students develop their critical thinking skills and to use them wisely for different purposes and in different situations. Collins et al., (1989) maintained that higher order thinking skills can best be taught through methods that employ situated learning.

However, fostering and supplying students with critical thinking skills is not an easy task as it requires many classes starting from using simple activities to more complex problem solving ones (Harizai and Hajrulla, 2017). Teachers need to model how to think critically and to apply critical thinking skills in their daily life through repeatedly asking students to give reasons for their decisions, mention expected results based on decisions, and give other alternatives that might exist (Snyder & Snyder, 2008).

It has been argued that critical thinking is not an innate skill as speaking or running, but it is an intentionally developed complex set of skills and properties that takes years to be acquired. Likewise, acquiring a foreign language needs years of continuous training, thus practicing both critical thinking skills and foreign language skills at the same time can save teachers' and learners' time and has a synergetic effect as developing one of them leads to improving the other (Foundation for Critical Thinking. 2009).

Critical thinking tasks are activities that have a determined goal through involving students in the learning process to reach specific results. According to Pineda (2003), open discussions, debated and role-play are examples of oral critical thinking related tasks that can foster classroom interaction as well as develop students' communicative competence in the target language. Other critical thinking tasks might require from learners to infer information from oral or written texts, to compare and contrast ideas, to identify advantages and disadvantages of different issues, to distinguish facts and opinions, to analyze collected information, to examine content of different types of texts, or to judge events and people's views about them.

Students learn well when being involved actively in activities that arouse their interest not by just attending lectures. Learning tasks must be interesting, easy, fun and promote interaction and collaborative work required for facing intellectual and linguistic challenges (Hassan, 2014). To make learning more fun and enjoyable, teachers need to use teaching and learning strategies that help learners understand better and facilitate their interest towards learning the English Language. Teachers need to arouse students' interest in following the lesson in the classroom as many students consider English language to be a difficult subject to learn. Students' interest has been reported to be one of the major elements for stimulating students' learning of the English Language (Amjah, 2014).

It has been maintained by some researchers that students' interest level can be improved if teachers use instructional materials that are interest based as this makes learners more willing and attentive in their learning. Because of such feelings of willingness for learning, the class becomes more interesting and consequently learners become more involved in learning the assigned materials (Heilman et al., 2010; Lee & Pulido, 2017; Reber et al., 2009; and Walkington & Sherman, 2013).

To sum up, taking into consideration the main role of heightened interest in learning in general and in language learning in particular, decision makers and curriculum designers should provide teachers with interesting authentic instructional materials and guide them to use suitable teaching and learning strategies that can help enriching their learners' interest in the language learning setting (Asgari et al., 2019). Besides, learning should be contextualized, as if learning takes place through abstract instruction, it will be restricted to the context in which it occurs and cannot be generalized to real life situations. Furthermore,

developing critical thinking skills needs to be one of the major concerns of foreign language teachers since the ability to think critically is very important in everyday life. Hence, it might be beneficial to train preparatory stage pupils to use some critical thinking skills to relate what they have learnt to real life situations through the implementation of a situated learning based strategy.

Background of the Research Problem:

Critical thinking is a basic ability that needs to be evolved by teachers through using effective teaching and learning strategies together with suitable teaching materials to develop their students' thinking skills. Reviewing literature has revealed the necessity of developing students' critical thinking skills in order to achieve better quality in education because the way students think influence their ability and effectiveness in learning (Setyowati et al., 2018).

Many researchers have claimed that though critical thinking is not easy to teach, it is a learnable skill that should be developed, practiced, and integrated into the EFL curriculum. They stressed that developing critical thinking requires immersing students in active learning situations and that instruction should be focused on the application of the content than the content itself (Snyder & Snyder, 2008; Martinez & Nino, 2013). Employed instructional strategies together with the context used for teaching a specific content should provide students with opportunities to solve practical problems and should also facilitate transfer of knowledge to work situations, a process which is supported by and can be fulfilled through using situated learning strategy (Ling & Choo, 2005).

Though proponents of situated learning claimed that higher order thinking is the outcome of learning within a situated learning-based environment, very little research has been conducted to evaluate the effect of situated learning elements on students' critical thinking abilities (Herrington & Oliver, 1999; Ling & Choo, 2005). It is fundamental that students not only acquire knowledge and skills, but also can use them when they perform in real work context (Ling & Choo, 2005). However, when learning is based on memorization, enhancement of critical thinking skills can be interrupted and thus leads students to lose interest in learning (Chapman, 2001). Kusmaryati & Amertaningrum (2017) stressed that interest plays an important role in developing students' thinking ability.

In order to specify critical thinking skills suitable for preparatory stage pupils, a checklist of critical thinking skills has been designed and applied to a group of preparatory school teachers as well as university staff.

While supervising the teaching practice at different preparatory schools, it has been noticed that teachers were almost focused on developing their students' language skills while less or no focus is directed to developing students' critical thinking skills. It has also been recognized that almost all used materials, teaching and learning strategies and activities together with exercises and evaluation techniques focus on teaching and assessing learners' language skills. Moreover, knowledge and activities were found to be decontextualized from real life situations. Knowledge is usually memorized, tested and might accordingly be forgotten afterwards. The purpose of instruction should not be to test students' memorization of a covered content but to prepare them to use what has been learnt in a useful and meaningful way outside school setting. Unfortunately, instructional techniques used by teachers do not always help students reach that goal. Thus it might be useful to provide teachers with a situated learning - based strategy that employs authentic tasks and activities in order to help their students transfer knowledge they acquire in class to real life situations.

Besides, foreign language learning interest should be taken into consideration as literature revealed that when learners are filled with a higher interest level, successful learning takes place because of being more attentive to the teacher, materials, context, as well as classmates. Hence, it is suggested that teachers should provide students with instructional materials that can enrich their interest in learning English (Asgari et al., 2019).

To conclude, recognizing that preparatory stage pupils lack critical thinking skills suitable for their age, supported by a comprehensive review of literature created a real need for constructing and implementing a situated learning- based strategy to develop students' critical thinking skills and to enhance their language learning interest.

Statement of the Problem:

Preparatory stage pupils in Assuit Governate lack necessary critical thinking skills. In the light of the results of many studies showing the positive effect of using situated learning strategy with a widely diverse

population of students, the present research intended to construct and apply a situated learning- based strategy and investigate its effect on developing preparatory stage pupils critical thinking skills and on enhancing their English language learning interest.

Research Questions :

1. What is the effect of using a situated learning- based strategy in developing preparatory stage pupils' critical thinking skills?
2. What is the effect of using a situated learning- based strategy in enhancing preparatory stage pupils' English language learning interest?

Research Objectives :

The present research has aimed at:

1. Developing preparatory stage pupils' critical thinking skills using situated learning-based strategy.
2. Enhancing preparatory stage pupils' English language learning interest using a situated learning-based strategy.

Significance of the Study :

The present study might be significant in the following:

1. By using situated learning-based strategy in which instruction is given in meaningful contextualized learning environments, that is completely different from formal educational settings, the research study would be useful in developing preparatory stage pupils' critical thinking skills.
2. It would enlarge teachers' knowledge base about critical thinking skills and thus direct their attention to the necessity and significance of developing those skills at the part of their students.
3. The present study is one of the few studies, up to the researcher's knowledge, dealt with using situated learning model to develop preparatory school pupils' critical thinking skills.
4. It would provide EFL teachers with several authentic tasks, materials and activities that can be beneficial in developing preparatory stage pupils' critical thinking skills and in enhancing their English language learning interest.

5. It would provide EFL preparatory stage teachers with a workable critical thinking skills test and a questionnaire of English language learning interest.

Research Delimitations :

The present research is limited to the following:

1. Second year preparatory stage pupils in Esmat Afifi school, Assuit City.
2. The experiment lasted for (16) sessions distributed over (8) weeks. Each session lasted for (110) minutes. The total instruction was (29) hours.
3. The study aimed at developing a number of critical thinking skills at preparatory stage pupils. The skills were determined on the basis of reviewing literature together with results obtained from applying a checklist of critical thinking skills to determine the ones appropriate for preparatory stage pupils.

According to the jury opinions together with checklist results the main critical thinking skills deemed appropriate for preparatory stage were:

- a. Distinguishing between facts and hypotheses or opinions.
- b. Recognizing cause-effect relationship.
- c. Comparing and contrasting ideas.
- d. Recognizing different text organization patterns.
- e. Reordering ideas to form meaningful context.
- f. Drawing logical inferences based on text visual features, background knowledge, or evidence from the text.
- g. Identifying problem-solution text structure.
- h. Judging relevance of information.

Research Terminology :

To facilitate reading and understanding the research, the following definitions are presented:

- a. Situated Learning:

D, Souza and Clare (2018:29) define situated learning as “instructional approach where pupils are more inclined to learn by actively participating in the learning experience. It is essentially a matter of creating meaning from one’s learning experiences or daily living in real life contexts”.

For the specific purposes of the present research, situated learning is operationally defined here as “an instructional model that allows preparatory school pupils to learn through socializing with other people in real life situations or settings through observing and imitating teachers’ demonstrations of activities. It refers to creating the conditions in which learners can experience the complexity and vagueness of the real world and learn through interacting and cooperating together. In this model authentic contexts and materials are used to develop learners’ critical thinking skills and raise their interest level to learn English”.

b. Critical thinking:

Foundation for Critical Thinking (2009:3) defines critical thinking as “the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and evaluating information gathered from or by observation, experience, reflection, reasoning, or communication as a guide to belief and action:.

In the light of this and for the specific purposes of the present research critical thinking is defined as “learners’ ability to use their cognitive skills to identify cause/effect relationships, compare and contrast ideas, distinguish facts from hypotheses, recognize different text organization patterns, make correct inferences, identify problems together with suitable solutions, and judge relevance of information”.

c. Language Learning Interest:

Harackiewicz et al., (2018:1) define interest as “powerful motivational process that energizes learning, guides academic and career trajectories, and is essential to academic success”.

In this research, language learning interest is used to refer to “motivating and stimulating students’ desire to learn the English language through the use of authentic contexts, tasks and materials based on the situated learning model”.

Research Hypotheses:

1. There would be a statistically significant difference between the mean scores of the pupils on the pre-posttest of critical thinking skills favoring the post application.
2. There would be a statistically significant difference between the mean scores of the pupils on the pre-post application of the English language learning interest questionnaire favoring the post application.

Research Procedures:

To answer the research questions, the following procedures were adopted:

1. Reviewing the pertinent research and literature related to situated learning strategy, critical thinking skills, and English language learning interest.
2. Introducing a theoretical background dealing with situated learning strategy, critical thinking skills, as well as English language learning interest.
3. Developing a checklist of critical thinking sub-skills in its preliminary form in the light of literature review.
4. Administering the list to jury members to check which ones are appropriate and which ones are not needed if any.
5. Making suitable amendments in the checklist of skills based on the jury's recommendations and suggestions, then setting the list in its final form.
6. Administering the checklist to a number of teachers to determine the importance of each skill together with its suitability to preparatory stage pupils.
7. Determining a final list of critical thinking sub-skills in the light of teachers' comments.
8. Designing lessons based on situated learning-based strategy aimed to develop preparatory stage pupils' critical thinking skills and enhance their English language learning interest.
9. Building the critical thinking sub-skills test and the English language learning interest questionnaire.
10. Judging the validity and appropriateness of the situated learning - based strategy guide, the critical thinking sub-skills test and the English language learning interest questionnaire by a jury of TEFL specialists.
11. Piloting the test, the questionnaire, and some parts of the situated learning based strategy guide on a small group of students to measure their validity, reliability and duration. In the light of their suggestions some items and activities were modified or substituted and others were deleted. The jury members agreed that the final form of the test, the questionnaire and the situated learning based strategy guide were valid.

12. Administering the Critical Thinking Sub-skills Test (pre-testing) to assess students' level in critical thinking skills.
13. Administering the Questionnaire of English Language Learning Interest (pre-testing) to assess students' level of interest in learning English.
14. Implementing the situated learning-based strategy guide to group of the research.
15. Administering the Critical Thinking Sub-skills Test and the Questionnaire of English Language Learning Interest (post-testing) to measure the effect of the suggested situated learning- based strategy guide.
16. Analyzing the data statistically.
17. Discussing the results obtained and providing recommendations.

Theoretical Background and Review of Literature:

Situated Learning Strategy:

Situated learning is a learning model proposed by Lave and Wenger (1991) who believed that students learn more by active participation in their learning domains as contrasted to listening to their classroom teachers. Situated learning is a method of creating meaning from real life activities where learning takes place. It is based on the idea that learning is included in the situation in which the experience exists not in the individual, which is the main difference between this theory and other constructivists' theories of learning. Learning theories allot more importance to the individual, while situated learning theory focuses more on the social context (Gawande & Alsenaidi, 2015).

Situated learning is a model of learning based on the viewpoint that learning should take place in the contextual environment (Erickson, 2007). Reder et al., (1996) also proposed that learning should be contextualized as situated learning stresses the relationship between what is learned in the classroom and what is required outside it. Thus, activities should be based on the contextual situation in which they might take place. Hossainy et al., (2012) reached the result that situated learning was a good instructional method that increased students' academic achievement and motivation for learning as compared to lecture-based learning

Situated cognition is an important theory about the nature of learning which emphasizes and reinforces authentic learning. In a

situated learning environment, the learning of knowledge and skills takes place in contexts that mirror how that knowledge is obtained and applied in everyday situations (Lve & Wenger, 1991). Situated learning stresses that students need to take opportunities to demonstrate their abilities and talents through providing them with a learning environment that reflects the culture and tools that are very similar to those used in real life situations (Kazulin et al., 2003; and Schoenfeld, 2013). Handely et al. (2006:3) clarified that situated learning theory considers learning to be “integral to everyday practice in work places, family, and other social settings”. Similarly, Vygotsky’s sociocultural theory affirms that individuals’ development cannot be understood without referring to the social environment in which the individual is situated (Driscoll, 2000). It has been maintained by Young (1993:43) that using authentic tasks enables students to immerse themselves in the culture of a specific domain. Through being immersed in a realistic context, students’ need to learn certain repetitive skills becomes evident and thus less direct explanation will be required from their teacher.

Ozudogru & Ozudogru (2017) employed situated learning environments which provided learners with authentic learning opportunities and realistic situations that they might encounter in the real world. The study aimed at exploring students’ perceptions about the activities based on situated learning. Results of the study indicated that students were satisfied with the learning environment and perceived it as a factor that facilitated learning and enhanced their engagement and communication with the instructor. The results of this study is consistent with that of Pan (2005) who maintained that using situated learning based activities, students’ engagement in second language learning environment was enhanced. He reported that collaborative learning has been realized to be one of the most important characteristics of situated learning as students shared their ideas and thus could learn from each other. He added that students were mostly satisfied with the instruction based on situated learning principles and that most of them perceived the applications of situated learning as beneficial and fun which consequently aroused their interest in learning the English language.

Situated learning theory proposes that learning is practiced and mediated throughout the relationships with community members. Farmer and Hughes (2005:4) argued that in situated learning theory, learning is considered as a “process or function of activity within a community of

practice” where members of a group cooperatively share and develop practices, learn from interacting with group members, and take advantages to develop personally, professionally and intellectually (Lave & Wenger, 1991; Mills, 2013). Interaction among practitioners produces an increase in the knowledge and skill at the part of each individual besides a change in community discourse. These changes contribute to the development of individual’s identity. Such identity development can be found when an individual moves from the state of legitimate peripheral participation to the state of full participation. New comers are referred to as peripheral participants compared to more experienced individuals in the community who are known as full participants (Lave & Wenger, 1991). Through creating learning goals, experiencing different social situations, interacting with other members, and engaging in the community, a peripheral participant progresses to be a full participant (Yang, 2005).

Based on the situated learning theory, learning is handled and best presented through actual and complex problems that enable learners to learn, think and practice as professionals in the field. Content is learned through problem solving activities rather than abstract packages of information introduced by the instructor. The instructor’s role changes from building and providing knowledge and information through lectures to modeling, coaching, and scaffolding learners since they use information and generate knowledge to solve contextual real-life problems. Situated learning environments should support active environment negotiation, evaluation, as well as reflective thinking.

The cognitive goal of situated learning is acquiring cognitive skills and strategies that takes place through continued participation within a community (Brown et al., 1989; Collins et al., 1989; Prawat & Folden, 1994). The main difference between traditional schooling and situated learning is that traditional schooling believes that learning and doing are separate. Collins et al., (1989) clarified that in a situated learning environment, students can observe how experts address problems and thus learn to solve problems they might encounter in real life situations. In the same way through guided practice.

One of the key concepts of situated learning is the collaborative process in which students interact with other individuals in the “community of practice” (Henning, 1998; Wilson & Cole, 1996; Duffy & Cunningham, 1996). Situated learning supports using collaborative

and participative teaching methods, activities and assignments, the best form of participatory learning, as a means of acquiring knowledge. Knowledge is created through the interaction of a learner with other learners and with the environment (Stein, 1998; Vincini, 2003). Lier (2001) and Gablinske, (2014) maintained that when learners cooperate to fulfill classroom tasks assigned by teachers, this can benefit low-achieving students through allowing them to participate more, develop a better understanding and acquire knowledge through experiencing and taking part in real life situations.

According to (Anderson et al., 1996 & Wilson, 1993) a situated learning experience has four main premises that guide the development of classroom activities which are; (1) learning is based on the actions of daily situations, (2) knowledge is acquired situationally and transfers only to alike situations, (3) learning is the result of a social process that includes ways of thinking, perceiving, problem-solving, and interacting, and (4) learning is not separated from the world but takes place in complex, social environments composed of actors, actions, and situations. Accordingly, proponents of situated learning theory maintain that thinking, learning and doing are inseparable from the practical and social situations in which they occur. They work in harmony when the students are given the chance to take part, express, and exchange their thoughts and hence build their cognitive abilities.

When designing a situated learning based classroom, instructors should consider five main tasks namely; modeling, coaching, scaffolding, fading and evaluation. Instructors should select situations that can engage learners in complex, authentic problem centered activities to help them acquire the desired knowledge. Instructors should use authentic materials to make students feel how the language they learn is used in the real context. Authentic materials could be in the form of printed, video or audio such as newspapers, magazines, photos, radio broadcasts, real conversations, or authentic videos (Fachraini & Sartika, 2019). Modeling is one of the strong elements of situated learning where learners observe the activity performed step -by- step by an experienced member of the community and allow the experienced members to share knowledge with less experienced ones (Salomonidou, 2009; Kundi & Nawaz; 2010). Instructors then provide a scaffold for new learners by supplying them with instructional approaches and intellectual support to master a process or an activity. At the coaching stage the instructor

observes the learner and provides feedback as needed to help him/her reach the level of the expert (Collins et al., 1989). When learners acquire more skills, less support will be needed as instructors modify their roles from content transmitters to facilitators of learning through tracking progress, assessing learners' products, building collaborative learning environments, encouraging reflection and helping learners become more aware of contextual cues to aid comprehension and transference. The last task is evaluating learners' intellectual growth and giving them feedback (Ottoson, 1997).

It can be concluded that there are various benefits for using the situated learning model for instance; it helps students to become more actively engaged in learning, it can provide instructors and learners with authentic contexts that reflect how the knowledge or skills would be applied in the work setting, it also supplies learners with collaborative activities that might allow them to share ideas and thus can learn from each other. Moreover, using authentic learning materials and activities can help students learn and apply the knowledge or skills and make learning more enjoyable and fun and thus might enhance their language learning interest. Though, it has been recognized that very few studies, up to the researcher's knowledge, have been conducted in Arab countries dealing with developing critical thinking skills at preparatory stage pupils. This highlights the need to implement the situated learning-based strategy to develop preparatory stage pupils' critical thinking skills and enhance their English language learning interest.

Critical Thinking Skills:

Critical thinking is a basic ability nowadays as individuals are confronted with a lot of information, complicated problems and fast social and technological changes. Currently, fostering critical thinking is among the main tasks and concerns of teachers. In education, critical thinking refers to the process of thinking to reach a decision based on various aspects such as evidence, criteria, context, methods, as well as relevant information sources (Harizai & Hajrulla, 2017). Ruggeriero (2012) called it "the art of thinking about thinking" with the purpose of improving one's thinking. Critical thinking surpasses memorization as it encourages learners to draw logical inferences, solve problems, connect ideas, think creatively, and apply knowledge in new ways. Chapman (2001) confirmed that learning that is based on memorization

rather than active participation surely interrupts the development of critical thinking and has a low effect on retention of long term knowledge, transfer of knowledge to new situations, higher order thinking as well as motivation for further learning.

Critical thinking skills are not, as believed, only applicable to subjects like math and science, but are vital for success in all subject areas and in everyday life as well. Marin and Halpern (2011) reached the result that implementing critical thinking in EFL pedagogy context has been effective in improving learners' language skills, though still more research is required. A person is considered critical thinker as much as he/she regularly improves his/her thinking intentionally. The main aim behind studying critical thinking is simply to determine the strengths and weaknesses in an individual's thinking in order to support strengths and enhance weaknesses (Murawski, 2014).

In the 1960s, Robert Ennis raised the idea that critical thinking skills can be taught in the classroom and reflected in the working environment. Ennis stressed that critical thinking is a learned skill that, if taught and practiced, could be transferred to the work environment (2011).

Reviewing literature revealed the significance and necessity of developing critical thinking skills at students of all ages. Students need to acquire the critical thinking skills to be able to apply the knowledge they have to solve daily faced problems in life or at work environment (Barrows & Lynda, 2007; Arslan & Devecioglu, 2010). Teaching critical thinking gives students the opportunity to understand and become responsible for their learning. Implementing critical thinking skills enables students to access the courseware in a better thoughtful and efficient way, pose challenging questions, and engage more deeply in the learning process. Moreover, students who develop their critical thinking skills are more likely to use them well later in life and might affect and change their lives forever as such skills can be conveyed to both academic and job environments (Murawski, 2014).

Ruggiero (2012) maintained that critical thinkers share some characteristics such as being able to move beyond typical thinking models to advanced method of thinking. Critical thinkers produce more ideas and usually improve their ideas compared to poor thinkers, they also make decisions based on facts or information. They become more skilled in their thinking by using different inquiry techniques that help

them discover new ideas. Critical thinkers also look at problems from different perspectives, take intellectual risks, are more adventurous, consider unusual ideas and use their imagination when analyzing problems and issues. Critical thinkers monitor, reflect, and correct their thinking. He stressed that critical thinkers need suitable teaching and learning environments that promote all these issues to help them become effective well prepared learners.

Literature revealed that if students are actively engaged in project-based or collaborative activities, their critical thinking ability can be developed (Snyder & Snyder, 2008). Isakesen (2017) advocated that situated learning highlights higher order critical thinking processes rather than merely acquiring facts. Hence, knowledge is constructed through learners' daily experiences and application rather than retention becomes a sign of successful learning. Monroy- Licht et al., (2016) conducted a study aimed at developing critical thinking skills at college students by structuring a real, problematic situation. Results revealed that study group experienced meaningful learning and improved their inference skills, interpretation, evaluation and self-regulation. The study showed that situated learning is an ideal learning framework for enhancing development of students' critical thinking skills.

Effective thinking is developed through working collaboratively in pairs or in groups, which is one of the key concepts of situated learning theory. Scriven and Richard (2003) believe that there is always a chance for enhancing our critical thinking skills and abilities through collaborative work and task- based approach where students can scaffold critical thinking skills. Cooper et al., (1990) also maintained that working in groups develops students' ability to solve problems and proves a greater understanding of the material. In a similar vein, McGrath (2003) stated that working in groups engage students in solving authentic challenging problems that can be immersed in the curriculum. He stressed that students who worked in collaborative groups were more satisfied with their classes as they have the chance to exchange ideas, take positions on specific roles, and negotiate significantly. Moreover, students showed interest in academic activities and were more relaxed and enthusiastic.

According to Piaget (1973), to develop critical thinking means to make learners experience the environment in which they think. Children cannot move from a stage of thinking to a more advanced one suddenly,

but utilizing the existing capabilities of children at the present stage would lead them automatically to the next stage. De Bono (1991) maintained that thinking is a skill that can be taught, developed and improved.

Critical thinking entails developing important skills namely; reasoning, interpreting, analyzing and evaluating information. Pineda-Baez (2004) stated that along with knowledge, critical thinking includes other cognitive skills such as interpretation, analysis, evaluation, inference and self-regulation. Critical thinking relays on updating knowledge, analyzing differences, extracting ideas from examples, observing cause/effect relations and evaluating information based on value, utility or positive and negative effects (Florea & Hurjui, 2015). Analysis refers to “the ability to establish relationships among components and understand principles of organization” (Baez, 2004:50). It involves three sub-categories that are; distinguishing facts from opinions, understanding relations among ideas as well as cause/effect sequences, and analysis of principles of organization.

Inference is a cognitive skill that refers to reaching a conclusion or an opinion based on facts or evidence. According to Elder and Paul, “inferences are conclusions you come to. It is what the mind does in figuring something out based on assumptions and ideas” (The Aspiring Thinker’s Guide to Critical Thinking, 2009:24). Evaluation refers to the ability to form judgments about the value of ideas, relevance of information, the validity of statements, events, expressions, and opinions (Pineda-Baez, 2004).

To sum up, it is very essential to specify and develop critical thinking skills necessary and suitable for students’ age level as the way students think affects their learning ability and efficacy. If developed well, critical thinking skills will provide learners with proficient ways for communicating with others, gain knowledge, and manage their ideas, beliefs, and attitudes. Taking into consideration that the educational system is recently in rapid and lasting change, teachers are required to prepare that type of student who can analyze, reflect, infer, evaluate and argue during learning. Moreover, language teachers should combine the teaching of critical thinking skills with the teaching of foreign language skills to help students practice a more meaningful learning experience and achieve better learning outcomes in order to be the students teachers always want.

Language Learning Interest:

Interest is one of the most powerful motivations for learning English. It has been identified as one of the main factors affecting English language learning (Gardner, 1985). Learning and interest have the same importance as while learning makes us gain new knowledge and skills, interest pushes us to go through the learning process. It also plays an important role in developing students' thinking skills (Wimolmas, 2013). According to Piaget, children are active learners and thinkers who conduct their own knowledge from working with objects or ideas. They interact with the surrounding world and solve faced problems. Being interested in what is learned, it is expected that students will pay closer attention to it, process information more efficiently, and employ more effective learning strategies. When students are interested in learning tasks, they try to work harder to achieve desired learning goals.

Literature revealed that interest can stimulate learners in any subject area as when learners are interested in what they are learning, they will be more focused and attentive (Amjah, 2014; Ebbbers, 2011). Dewey (1938) maintained that results of interest based learning differs qualitatively from that of learning based only on effort in that effort – based learning is mechanical and produces knowledge and habits lacking any mental worth.

Interest plays a significant and main role in education and specially in foreign or second language learning. Hidi (2006:112) define interest as “heightened attention and emotional engagement that emerges when a person has a positive interaction with a content area or a task”. Interest can probably result in learners' more interaction and increase in their concentration and motivation to learn. Increase in learners' interest level leads them to become more highly motivated, concerned, and attentive, this state of attentiveness might help them learn prescribed materials. Tobias (1994) has emphasized the importance of studying the effect of interest on learning and retention. He claimed that interest needs to be investigated closely to determine how to enhance its' effect on learning. Eidswick (2010) similarly stressed the importance of interest to the learning process and suggested that teachers should try to use attractive topics and should design interesting classroom activities.

Many researchers have claimed that interest-based instructional materials help learners become more willing and engaged in their

learning. They stressed the need for selecting and arranging instructional materials that involve topics related to learners' area of interest. They stressed that material developers as well as teachers should provide language learners with materials that help them maintain their efforts to learn with an increased interest level (Heilman et al., 2010; Lee & Pulido; 2017, Reber et al., 2009).

Literature has distinguished two types of interest; situational and individual interest. Situation interest is an emotional state accomplished by situational stimuli (Anderson et al., 1987; Hidi, 1990; Kintsch, 1980). Situational interest has been reported to positively influence learners' cognitive performance (Hidi, 1990; Young, 2005). Individual interest refers to a person's relatively permanent willingness to re-engage with certain content, specific topics, areas or activities over time (Hidi, 1990; Prenzel, 1988; Renninger, 1990). Individual interest is thus a topic specific and has a long lasting intrinsic value. It relates to a person's knowledge and experiences (Renninger & Hidi, 2000).

To make learning more enjoyable and meaningful, teachers should place students in authentic learning situations that reflect real life applications of the content, which is one of the main elements of situated cognition. Teachers should immerse students in authentic contexts and engage them in authentic tasks in which he/she uses authentic materials that give learners genuine exposure to the target language. According to Brown et al., (1996), authentic tasks are those tasks that are common in the daily situations of practitioners or experts in the field. Guariento and Morley (2001) argued that nowadays there is a general agreement in the field of language teaching on the beneficiality of authentic materials to the learning process.

To conclude, reviewing literature revealed that it is highly suggested that language learning interest level should be considered as an effective variable that can positively assist foreign language learners in their learning tasks. Accordingly decision makers and syllabus designers should provide teachers with teaching and learning strategies, materials and activities that can help enhancing students' interest in learning English.

Material and Methods:

1. The Experimental Design:

The present research used a pre-post experimental group design. The research group was exposed to pre and post means of getting data. The research used only one group. The group of the research included (30) second year preparatory stage pupils. This design was chosen to evaluate the impact of the suggested situated learning- based strategy on developing second year preparatory stage pupils' critical thinking skills and enhancing their English language learning interest.

2. Participants:

a. The Pilot Study:

A group of fifty second year preparatory school pupils, at a number of preparatory schools in Assuit city were randomly selected to participate in the pilot study to evaluate the effectiveness of the suggested situated learning- based strategy and tools of the research.

b. Participants:

Thirty second year preparatory school pupils at Esmat Afif preparatory school in Assuit city were randomly selected and participated in the study.

3. Tools of the Research:

- a. Situated Learning- based Strategy (Teacher's Guide and Students' book).
- b. The Critical Thinking Sub-skills Checklist.
- c. The Critical Thinking Sub-skills Test.
- d. The Questionnaire of English Language Learning Interest.
 - a. *Situated Learning-Based Strategy (Teacher's Guide and Students' book):*
 - (1). The teachers' guide and students' book were intended to develop some critical thinking sub-skills at the preparatory school pupils. The proposed situated learning –based strategy guide was divided into three units. Each unit deals with a main critical thinking skill that branches into a number of sub-skills. These sub-skills are introduced in lessons that begin with a general objective and branches out into a number of behavioral objectives. Unit one deals with analyzing texts and contains five critical thinking sub-skills namely; distinguishing between facts

and hypotheses, recognizing cause-effect relationship, comparing and contrasting ideas, recognizing different text organization patterns, and identifying problem-solution text structure. Unit two focuses on drawing logical inferences and contains one lesson. Unit three deals with evaluation skill and includes one lesson.

(2). The teachers' guide and students' book included:

- a. The learning objectives for each lesson, materials and time assigned for each lesson.
- b. A detailed step-by step instruction on how a lesson can be taught effectively.
- c. Each lesson contains a number of situations and each situation includes seven main components which are: (1) setting or situation, (2) duration, (3) teacher's role, (4) students' role, (5) procedures, (6) evaluation, and (7) feedback.
- d. Each lesson ends with evaluation exercises and a general evaluation is provided by the end of each unit.
- e. Materials of the lessons were adopted from different resources and included; authentic magazine or newspaper articles and advertisements, market brochures, authentic videos, photos, authentic stories, and authentic audios. Examples of used settings are; school yard, school library, computer lab, and school canteen.

4. Criteria for Selecting the Materials:

According to Efe et al., (2011), the use of authentic materials is one of the main elements of situated learning practice. Authentic materials are those materials that are not created for the learning purpose such as newspapers, magazines, photos, radio broadcasts, emails, or songs. There are certain criteria for selecting such materials as to:

- a. Match learners' readiness level, interest and learning profiles.
- b. Facilitate the use of the specified critical thinking skills.
- c. Be simple as well as fun and interesting.
- d. Use clear language.
- e. Relate to the content of the suggested situation or setting.

5. Methods used in teaching:

The independent use of the critical thinking skills is preceded by modeling of each skill as the teacher performs the tasks step-by-step so that students can complete the task alone. Then scaffold is provided by the teacher to help students master the situation. As learners acquire desired skills, less support is provided. The teacher tracks students' progress, assesses their products and gives feedback.

6. Evaluation Techniques:

Two types of evaluation were used in the present research: Formative and Summative evaluation. Formative evaluation is a continuous process during the time of application. It is conducted for the purpose of assessing pupils' progress and providing feedback on their performance. The procedures of formative evaluation consisted of a set of questions given to pupils after each unit to assess their comprehension level.

The second type of evaluation is summative. It is conducted at the end of the experiment taking the form of the post administration of the test and the questionnaire to measure the effect of the suggested situated learning-based strategy.

7. Duration of the experiment:

The experiment lasted for (29) hours, divided into (16) sessions, four sessions a week, (110 minutes) for a session.

6. Instructional aids used:

- a. Magazines
- b. Newspapers
- c. Photos
- d. Brochures
- e. Videos
- f. Stories
- g. Classroom board

8. Validity of the suggested- learning based strategy guide:

To establish the validity of the suggested situated learning-based strategy guide, a copy of the objectives, the activities, the tools and teaching techniques was submitted to a panel of jury to determine the face validity of the suggested situated learning- based strategy guide and to decide on:

- a. Linguistic stating of items.
- b. Appropriateness of the objectives for the subjects.

- c. Academic verification of the content.
- d. Relatedness of the content to the objectives.
- e. Appropriateness of the methodology used in teaching for both content and group of the study.
- f. Appropriateness of the evaluation means for the objectives.
- g. Trainability.

The jury members agreed that the suggested situated learning-based strategy guide is valid. They suggested some modifications which were taken into consideration in the final version of the suggested situated learning based strategy guide.

9. Piloting the suggested situated learning- based strategy guide:

Before implementing the suggested situated learning based strategy guide, the researcher conducted a pilot study that lasted for a month implementing the first two lessons. The pilot study aimed at ensuring the clarity of instructions, suitability of the linguistic level of the material to the subjects and determining the time pupils need to complete each lesson as well as the approximate time needed for teaching all lessons. Tools of the study were also administered to the pilot group.

The Critical Thinking Sub-Skills Checklist (prepared by the researcher):

a. Objective of the checklist:

The objective of this checklist was to determine the critical thinking skills necessary and suitable for preparatory second graders and develop the pre-post critical thinking sub-skills test.

b. Sources of the Checklist:

In order to develop the critical thinking skills checklist in its initial form, the researcher reviewed studies related to critical thinking skills. The checklist contained (14) items that represent different critical thinking skills.

c. The rating Scale:

The checklist responses were assigned the scores (5-4-3-2-1) to represent the items (strongly agree-agree-undecided-disagree-strongly disagree).

d. Specifying Critical Thinking Skills suitable for Preparatory Stage Pupils:

The initial checklist was designed and submitted to a jury of faculty members as well as preparatory stage teachers (n=9) to determine their degree of agreement on the importance of each skill together with its' suitability to preparatory stage pupils. Taking their suggestions into consideration, the final checklist was written after modifying some skills, deleting unnecessary ones and adding others. The final checklist included (8) main skills. This was done by calculating average weight and percentage of agreement as clear in table (1) Appendix (F).

The Critical Thinking Sub-Skills Test (prepared by the researcher):

a. Objective of the Test:

The test is used as a pre-post test to determine whether second year preparatory stage pupils' level in critical thinking skills is developed as a result of using suggested situated learning based tasks or activities.

b. Construction of the Test:

The Test consisted of (19) questions that included (50) items to assess preparatory stage pupils' level in critical thinking skills.

c. Procedures for designing the Test:

1. Identifying the objectives of the test.
2. Suggesting items of the test and judging them by jury members.
3. Modifying the test according to the jury members' suggestions.
4. Piloting the test to ensure the clarity of instructions, suitability of the linguistic level to the subjects, and to determine the validity, reliability and time limit. Results indicate clarity of instructions and suitability of the test's linguistic level to the subjects. Pupils needed three hours to answer the questions of the test.

d. Validity of the Test:

Internal Consistency:

The Pearson Correlation Formula was used to determine the internal consistency of the test. The correlation between the score of each individual item and the total score of the skill was determined as shown in table (1) and found acceptable.

Correlation between each skill and total score of the Critical Thinking Sub-Skills Test was also calculated. It was evident that all values of correlation coefficients, which is significant at (0.01) level as shown in table (2) (0.3) were greater than

Table (1)

Internal consistency of the Critical Thinking Sub-Skills Test

Correlation between score of each individual item and the total score of its' skill

| Item | Correlation | Item | Correlation | Item | Correlation | Item | Correlation |
|------|-------------|------|-------------|------|-------------|------|-------------|
| 1 | 0.696 | 14 | 0.687 | 27 | 0.492 | 39 | 0.669 |
| 2 | 0.640 | 15 | 0.445 | 28 | 0.563 | 40 | 0.602 |
| 3 | 0.580 | 16 | 0.505 | 29 | 0.617 | 41 | 0.554 |
| 4 | 0.487 | 17 | 0.460 | 30 | 0.618 | 42 | 0.537 |
| 5 | 0.444 | 18 | 0.683 | 31 | 0.416 | 43 | 0.428 |
| 6 | 0.569 | 19 | 0.559 | 32 | 0.646 | 44 | 0.485 |
| 7 | 0.684 | 20 | 0.625 | 33 | 0.462 | 45 | 0.679 |
| 8 | 0.650 | 21 | 0.483 | 34 | 0.461 | 46 | 0.532 |
| 9 | 0.522 | 22 | 0.570 | 35 | 0.640 | 47 | 0.496 |
| 10 | 0.458 | 23 | 0.578 | 36 | 0.678 | 48 | 0.614 |
| 11 | 0.436 | 24 | 0.477 | 37 | 0.554 | 49 | 0.579 |
| 12 | 0.677 | 25 | 0.617 | 38 | 0.640 | 50 | 0.610 |
| 13 | 0.708 | 26 | 0.611 | | | | |

** Significant at (0.01) level, * significant at (0.05) level

Table (2)

Correlation between skills and total score of the Critical Thinking Sub-Skills Test

| No. | Skills | Correlation with test | Significance level |
|-----|---|-----------------------|--------------------|
| 1 | Distinguishing between facts and hypotheses or opinions | 0.509 | 0.01 |
| 2 | Recognizing cause-effect relationship | 0.685 | 0.01 |
| 3 | Comparing and contrasting ideas | 0.665 | 0.01 |
| 4 | Recognizing different text organization patterns | 0.420 | 0.01 |
| 5 | Reordering ideas to form meaningful context | 0.552 | 0.01 |
| 6 | Identifying problem-solution text structure | 0.449 | 0.01 |
| 7 | Drawing logical inferences based on text visual features, background knowledge, or evidence from the text | 0.609 | 0.01 |
| 8 | Judging relevance of information. | 0.579 | 0.01 |

e. Reliability of the Test:

To check reliability of the Critical Thinking Sub-Skills Test the Cronbach Alpha formula was used. The test was applied to the pilot (N=50). Coefficient Alpha is (0.81). All reliability coefficient values

were greater than (0.5) which is acceptable as shown in table (2) Appendix (F).

f. Instructions of the Test:

Test instructions are written in English. They are brief, simple to understand, and free from any possible ambiguity. They contain information about the objective of the test, time allowed to complete the test and how to record the answers. Instructions were translated and explained to group of the study.

g. Scoring the Test:

One score was allotted for each correct answer. The total score of the test is (50).

h. Item Type:

The items of the test are; multiple choice, matching and underlining, sentence completion, sentence writing.

The English Language Learning Interest Questionnaire (prepared by the researcher):

a. Designing the Questionnaire:

To build the English Language Learning Interest Questionnaire, the researcher reviewed literature and previous studies that have dealt with language learning interest.

The questionnaire has been presented to jury members including university staff, inspectors of English, as well as senior teachers to judge the validity of the statements and their appropriateness to the research purpose.

Suggested modifications have been made and the questionnaire has been introduced in its final form. The final version of the questionnaire included (18) statements.

b. The pilot experiment of the questionnaire:

The questionnaire was translated into Arabic and administered to group of thirty second year preparatory stage **pupils in order to recognize the following:**

The Validity of the questionnaire:

Content Validity:

This was based on suggestions of a group of experts in the field of English language teaching and making modifications in the light of their directions concerning:

- The suitability of the statements to the purpose of the questionnaire.
- The elimination or modification of any ambiguous inappropriate statement.
- The addition of certain statements.

Internal Consistency:

The Pearson Correlation Formula was also used to determine the internal consistency of the questionnaire. The correlation between the score of each individual statement and the total score of the questionnaire was determined and found to be acceptable as shown in table (3)

Table (3)

Internal consistency of the Language Learning Interest Questionnaire

| Item | Correlation with total score | Item | Correlation with total score | Item | Correlation with total score |
|-------------|-------------------------------------|-------------|-------------------------------------|-------------|-------------------------------------|
| 1 | 0.595 | 7 | 0.496 | 13 | 0.422 |
| 2 | 0.586 | 8 | 0.564 | 14 | 0.545 |
| 3 | 0.529 | 9 | 0.458 | 15 | 0.675 |
| 4 | 0.506 | 10 | 0.612 | 16 | 0.661 |
| 5 | 0.528 | 11 | 0.439 | 17 | 0.547 |
| 6 | 0.592 | 12 | 0.633 | 18 | 0.681 |

All values in the table are significant at (0.01) level

The above table shows that all values of correlation coefficient were found to be significant at (0.01) which confirms validity of the internal consistency of the statements with the overall questionnaire. This means that the questionnaire is valid.

Reliability of the Questionnaire:

To assure reliability of the questionnaire of English Language Learning Interest Cronbach Alpha formula was used. The questionnaire was applied to the pilot group (N=50). Coefficient Alpha was (0.739) which is greater than (0.7) which was found to be acceptable.

Significance of the Questionnaire responses:

The values of the responses on the positive items were as follows: 1= Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = strongly agree; the values of the responses on the negative items were reversed as follows: 5 = Strongly Disagree, 4 = Disagree, 3 = Undecided, 2 = Agree, and 1 = strongly agree.

Findings and Discussion :

1. Discussing the first research hypothesis:

The first research hypothesis states, “There would be a statistically significant difference between the mean scores of the pupils on the pre-posttest of critical thinking skills favoring the post application”.

To test this hypothesis, the Paired Samples t test was used to reveal significance of differences between means of scores of the study group in the pre and the post implementation of the Critical Thinking Sub- Skills Test as shown in the following table:

**Table (4)
Results of Paired Samples t Test in the pre-post implementation of the Critical Thinking Sub-Skills Test**

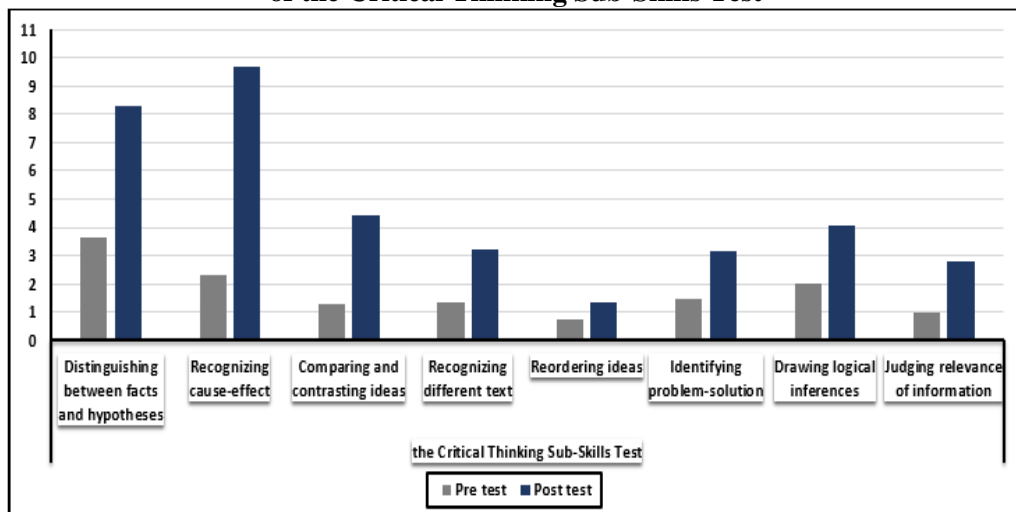
| Variables | N | Pre test | | Post test | | t value* | Sig. |
|---|----|----------|----------------|-----------|----------------|----------|------|
| | | Mean | std. deviation | Mean | std. deviation | | |
| Distinguishing between facts and hypotheses or opinions | 30 | 3.67 | 0.80 | 8.30 | 1.02 | 23.80 | 0.01 |
| Recognizing cause-effect relationship | 30 | 2.33 | 1.21 | 9.70 | 1.69 | 23.04 | 0.01 |
| Comparing and contrasting ideas | 30 | 1.27 | 0.94 | 4.43 | 1.01 | 13.75 | 0.01 |
| Recognizing different text organization patterns | 30 | 1.33 | 0.99 | 3.23 | 0.86 | 8.58 | 0.01 |
| Reordering ideas to form meaningful context | 30 | 0.77 | 0.63 | 1.33 | 0.61 | 4.96 | 0.01 |
| Identifying problem-solution text structure | 30 | 1.50 | 1.04 | 3.17 | 1.18 | 8.60 | 0.01 |
| Drawing logical inferences based on text visual features, background knowledge, or evidence from the text | 30 | 2.03 | 1.16 | 4.07 | 1.05 | 10.78 | 0.01 |
| Judging relevance of information. | 30 | 0.97 | 0.77 | 2.77 | 0.86 | 11.12 | 0.01 |
| the Critical Thinking Sub-Skills Test | 30 | 13.87 | 2.71 | 37.00 | 3.37 | 27.82 | 0.01 |

*degrees of freedom for t test = 29

Table (4) revealed a statistically significant difference at (0.01) level between means of ranks of the study group's scores in the pre and the post measurement of the critical thinking skills (distinguishing between facts and hypotheses or opinions; recognizing cause-effect relationship; comparing and contrasting ideas; recognizing different text organization patterns; reordering ideas to form meaningful context; identifying problem-solution text structure; drawing logical inferences based on text visual features, background knowledge, or evidence from the text; judging relevance of information) favoring the post measurement. The "t" values were (23.80, 23.04, 13.75, 8.58, 4.96, 8.60, 10.78, 11.12).

Figure (1) shows a comparison of means of scores of the study group in the pre and the post application of the critical thinking sub-skills test.

Figure (1) Means of Scores of the Study group in the pre and the post application of the Critical Thinking Sub-Skills Test



Comparing the results based on the pre-posttest basis showed that the students achieved a significant degree of improvement in favor of the posttest performance. Mean scores of the students on the posttest were significantly higher than those in the pre-test. This supports the first research hypothesis and affirms that students' use of critical thinking skills underwent a considerable improvement as a result of being trained by using the situated learning- based strategy. This result coincides with those of a number of studies that stressed the significance of using situated leaning strategy for developing critical thinking ability

(Herrington & Oliver, 1999; Ling & Choo, 2005). This result also agrees with other studies which confirmed that critical thinking ability could be improved (De Bono, 1991; Ling & Choo, 2005) if teachers used appropriate instruction based on situated learning strategy (Ling & Choo, 2005) as learning based on memorization interrupts the enhancement of learners' critical thinking ability (Chapman, 2001).

The above results implied also that the use of collaborative activities, authentic learning environment, together with authentic teaching materials had positive effect on students' critical thinking ability, which is a fundamental and very important capability for everyday life (Setyowati, et al., 2018). During the experiment, it has been noticed that students were very happy with the classroom environment based on using real life activities and content and with working together sharing ideas with their partners. Using group work activities enabled learners to investigate, participate, argue and thus develop their critical thinking ability in daily activities. Moreover, collaborative work enhanced learners' competition, an important element for learning, as students become more anxious to surpass their peers. Vdovina and Gaibisso (2013) confirmed that critical thinking requires interactive learning and that students learn better through communicating actively in a specific academic content especially if teachers encourage them to use critical thinking skills.

The above results agree with that of Snyder and Snyder (2008) who confirmed that critical thinking is a learnable skill that can be developed, practiced and integrated in the curriculum. They similarly stressed that teachers should use active learning situations to model how to think critically where the focus is on the application of the content rather than the content itself. In a similar vein, Florea and Hurjui (2015) stressed that critical thinking can be evolved if teachers developed appropriate learning environment, created learning situations and encouraged students to think independently, accept opposing opinions and ideas and work collaboratively to reach appropriate solutions for faced problems.

Thus, fostering students' critical thinking skills should be one of the main concerns of foreign language teachers and the objective of the curriculum should go beyond language skills to develop students' critical thinking skills through using various meaningful activities where students relate what is being learned to real life situations (Brown, 2004).

Educational institutions should incorporate instruction that aims at providing learners with critical thinking skills through using intervention programs that vary from traditional teaching approaches. Marin and Halpern (2011) confirmed that critical thinking can be better improved through using appropriate instruction. It can be concluded that using situated learning based- strategy was effective in developing preparatory stage pupils' critical thinking skills.

To ensure the effectiveness of using the situated learning strategy in developing critical thinking skills at preparatory stage pupils, Effect size Eta squared formula and Effect size Cohen's d were used as shown in the following table:

Table (5)
The Effect Size of Using situated learning strategy for developing some critical thinking skills at preparatory stage pupils

| Variables | effect size | | | |
|--|--------------|--------------|--------------|----------|
| | Eta squared | D | Level | rank |
| Distinguishing between facts and hypotheses or opinions | 0.951 | 8.69 | Large | 1 |
| Recognizing cause-effect relationship | 0.948 | 8.41 | Large | 2 |
| Comparing and contrasting ideas | 0.867 | 5.02 | Large | 3 |
| Recognizing different text organization patterns | 0.717 | 3.13 | Large | 7 |
| Reordering ideas to form meaningful context | 0.459 | 1.81 | Large | 8 |
| Identifying problem-solution text structure | 0.718 | 3.14 | Large | 6 |
| Drawing logical inferences based on text visual features, background knowledge, or evidence from the text | 0.800 | 3.94 | Large | 5 |
| Judging relevance of information | 0.810 | 4.06 | Large | 4 |
| the Critical Thinking Sub-Skills Test | 0.964 | 10.16 | Large | |

It is evident from table (5) that the effect size values were large for all critical thinking skills as well as for overall test score. It has also been noticed that the skill of "distinguishing between facts and hypotheses or opinions " took the first rank while the skill of "recognizing cause-effect relationship" came in the second rank. The skill of "comparing and contrasting ideas" took the third rank. Then the skill of "judging relevance of information" came in the fourth rank. Whereas the skill of "drawing logical inferences based on text visual "

took the fifth rank. Then in the sixth rank came the skill of “identifying problem-solution text structure”. The skill of “recognizing different text organization patterns” took the seventh rank. Whereas the skill of “reordering ideas to form meaningful context” ranked last.

2. Discussing the second research hypothesis:

The second research hypothesis states, “There would be a statistically significant difference between the mean scores of the pupils on the pre-post application of the English language learning interest questionnaire favoring the post application”.

To test this hypothesis, the Paired Samples t Test was used to reveal significance of differences between means of scores of the study group in the pre and the post implementation of the English Language Learning Interest Questionnaire before and after the implementation of the situated learning based strategy as shown in the following table:

**Table (6)
Results of Paired Samples t Test in the pre-post implementation of the English Language Learning Interest Questionnaire**

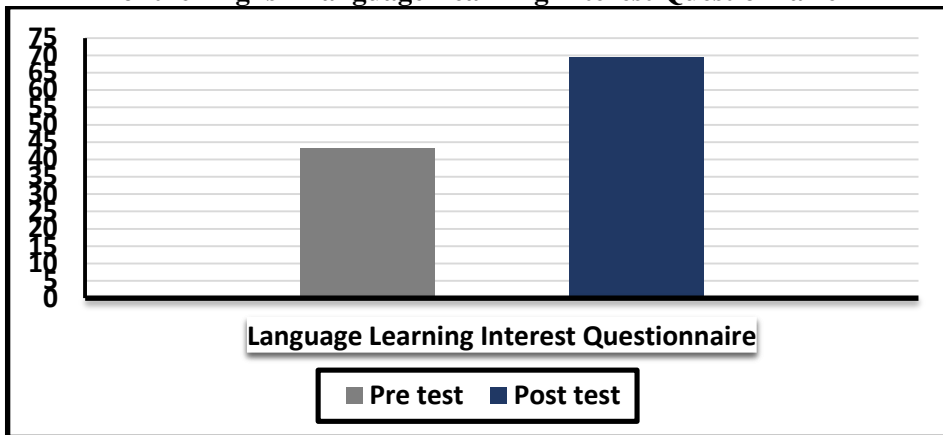
| Variables | N | pre test | | post test | | t value* | sig. |
|--|----|----------|----------------|-----------|----------------|----------|------|
| | | Mean | std. deviation | mean | std. deviation | | |
| Language Learning Interest Questionnaire | 30 | 43.23 | 3.65 | 69.37 | 3.40 | 32.47 | 0.01 |

*degrees of freedom for t test = 29

The previous table revealed a statistically significant difference at (0.01) level between means of the study group's scores in the pre and the post implementation of English Language Learning Interest Questionnaire favoring the post measurement. The t value was (32.47).

Figure (2) shows a comparison of means of scores of the study group in the pre and the post application of the English Language Learning Interest Questionnaire

Figure 2. Means of Scores of the Study group in the pre and the post application of the English Language Learning Interest Questionnaire



Results imply that students’ English language learning interest was enhanced after they have been instructed using the situated learning-based strategy. Amjah (2014) similarly reached the result that teachers need to use effective teaching strategies to arouse students’ interest in learning the English language and in following classroom instruction. He confirmed also that the use of authentic teaching materials and activities enabled teachers to foster their students’ interest in English language.

In a similar vein, different researchers have stressed that teachers should provide students with instructional materials that can enrich their interest in learning English, use attractive topics and design interesting classroom activities. They reported that raising students’ interest level leads to successful learning as learners become more attentive to the teacher, materials, context, as well as peers. (Asgari et al., 2019; Eidswick, 2010, Heilman et al., 2010; Lee & Pulido; 2017, Reber et al., 2009).

Similarly, Amjah (2014) and Ebbers (2011) confirmed that interest can stimulate learners in any subject area and revealed that if learners are interested in what they are learning, they will be more focused and alert. Hidi and Harackiewicz (2000) claimed that schools and teachers should seek ways that contribute in raising students’ interest in learning. Asgari (2019) reached the result that raising the learners’ interest level in the

language class, leads effective and successful learning to take place and encourages students to exert more effort in their learning.

Many researchers have pointed out that when instructional materials are interest-based, students become more willing to learn and get involved in learning the assigned materials (Heilman et al., 2010; Reber et al., 2009; Walkington, 2013).. Accordingly, instructional materials that involve topics and tasks related to students’ areas of interest should be one of the priorities of material developers in order to raise students’ interest level in language learning. Moreover, decision makers and syllabus designers should provide teachers with teaching and learning strategies, as situated learning model, that can help enhancing their students’ interest in learning English.

To ensure the effectiveness of using the situated learning strategy in enhancing preparatory stage pupils’ English language learning interest, Effect size Eta squared formula and Effect size Cohen's d were used as shown in the following table:

Table (7)

The Effect Size of Using situated learning-based strategy for developing English Language Learning Interest at preparatory stage pupils

| Variable | Effect size | | |
|--|-------------|-------|-------|
| | Eta squared | D | Level |
| The English Language Learning Interest Questionnaire | 0.973 | 11.85 | Large |

It is evident from the previous table that the effect size values were large which assures the effectiveness of the situated learning-based strategy in enhancing preparatory stage pupils’ English language learning interest.

Recommendations:

1. Including situated learning strategy in programs of teaching English as a foreign language to preparatory stage pupils.
2. Providing a teachers' guide for implementing the situated learning strategy.
3. Developing awareness and familiarity with the necessary critical thinking skills for preparatory stage pupils.
4. Directing teachers' attention to the importance of considering the students' interests and attitudes and of encouraging them to think critically.
5. Encouraging syllabus and material designers to include critical thinking issues both in students' book and in teacher training courses in order to invoke students' critical thinking skills and to help changing teachers' attitudes towards their students as well as toward themselves.

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