Using The Generative Learning Model for Developing Reading Comprehension Skills of Literary Texts and Reducing Mind Wandering among English Majors at Faculty of Education

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ABSTRACT

This study is an endeavor to study the effect of using the generative learning model to develop reading comprehension skills of literary texts and reducing mind wandering among second year English majors. Sixty-nine from second-year English majors enrolled in the English language section (primary education) at the Faculty of Education, Benha University were randomly distributed into two groups: an experimental group [N=33] and a control group [N=36]. Instruments of the study included an EFL reading comprehension skills of literary texts test and mind-wandering scale. The participants were administered to a reading comprehension skills of literary texts test and mind wandering scale both before and after the treatment. For 16 sessions, participants in the experimental group were accomplished a program based on using the generative learning model for developing their EFL reading comprehension skills of literary skills and reducing their mind wandering while those in the control group received their regular instruction. Results of the study showed that the experimental group students outperformed the control group peers; they showed high levels of reading comprehension as well as low level of mind wandering compared to their control peers. Consequently, it could be concluded that the use of generative learning model has a significant effect on second -year English majors, Faculty of Education. It was recommended to use the generative learning model in reading comprehension instruction and for reducing mind wandering.

Key words: Generative Learning Model, EFL Reading Comprehension Skills of Literary texts, Mind Wandering, English Majors.
استخدام نموذج التعلم التوليدي لتنمية مهارات الفهم القرائي للنصوص الأدبية وخفض التجول العقلي لدى طلاب شعبة اللغة الإنجليزية بكلية التربية

الملخص

أستخدم نموذج التعلم التوليدي لتنمية تهدف الدراسة الحالية إلى بيان أثر مدى فاعلية مهارات الفهم القرائي للنصوص الأدبية باللغة الإنجليزية كلغة أجنبية وخفض التجول العقلي لديهم. استخدمت الباحثة المنهج شبه التجريب والقياس القبلي والبعدي لعينة الدراسة من طلاب الفرقة الثانية بشهادة اللغة الإنجليزية (تعليم إبتدائي) بكلية التربية جامعتها بنها والتي تم اختيارهم عشوائياً وتقسيمهم إلى مجموعتين: المجموعة الضابطة وبلغ عددها ستة وثلاثون طالباً والمجموعة التجريبية وبلغ قومها ثلاثة وثلاثون طالباً. أشتملت أدوات الدراسة على اختبار لمهارات الفهم القرائي لغة الإنجليزية كلغة أجنبية للنصوص الأدبية ومقياس التجول العقلي. تم اختبار المجموعتين في مهارات الفهم القرائي للنصوص الأدبية باللغة الإنجليزية كلغة أجنبية قبل المعالجة وبعد الأنتهاء من تطبيقها. تم تدريب المجموعة التجريبية خلال ستة عشر جلسة من البرنامج لتنمية مهارات الفهم القرائي وخفض مهارات التجول العقلي؛ بينما تلقى طلاب المجموعة الضابطة التدريس بطريقة التقليدية. أثارت نتائج الدراسة إلى نفوذ طلاب المجموعة التجريبية الذين تلقوا التدريس من خلال نموذج التعلم التوليدي على أقرانهم في المجموعة الضابطة. فقد أظهروا مستويات عالية من مهارات الفهم القرائي وخفض التجول العقلي مقارنة بأقرانهم في المجموعة الضابطة. وتوفرت هذه النتائج على مدى فاعلية استخدام نموذج التعلم التوليدي لتنمية مهارات الفهم القرائي للنصوص الأدبية باللغة الإنجليزية كلغة أجنبية. وخفض التجول العقلي لدى طلاب الفرقة الثانية تعليم أبتدائي - شعبة اللغة الإنجليزية بكلية التربية جامعتها بنها. تم تقديم توصيات لاستخدام استراتيجيات لنموذج التعلم التوليدي في برامج تنمية الفهم القرائي باللغة الإنجليزية كلغة أجنبية.

الكلمات المفتاحية: نموذج التعلم التوليدي- مهارات الفهم القرائي للنصوص الأدبية -تجول العقلي -طلاب شعبة اللغة الإنجليزية بكلية التربية
1. Introduction

The core of English language programs, particularly in the EFL environment, is the study of literary texts. Studying the literary texts increases the students' general language competency. Advocates for employing literary texts in English language programs extol their benefits, especially in supporting learners in keeping the programs' distinct objectives. Literary language is useful for language acquisition as its main goal is "the revealing of innovation, of the knowledge of oneself and of others exhibited by that language used in literary texts."

There are many types of literature such as: novels, short story and poetry. Moreover, it presents a musing techniques for EFL learners. Students can use literature types to enhance their language skills and aspects. They enjoy learning English through literature, which gives them a strong motivation to master the language. Literature helps students increase their vocabulary, learn how to use the language properly, and develop their logical and explanatory abilities. Moreover, Apprentices intentionally achieved grammatical proficiency as a key to comprehending literature. (Ashrafuzzaman, Ahmed, & Begum, 2021)

Reading skill is the cause for developing other language skills. Through reading, EFL learners attain a large amount of vocabulary that is too essential for all skills. Reading comprehension is one of the prominent skill in the daily life (Yogantari and Dwijendra, 2020). Literal, inferential, and critical comprehension are the three main levels of comprehension (Roehrig, Petscher, Nettles, Hudson, & Torgesen, 2008). The literal comprehension focused on interpreting the passage's evident information. Inferential comprehension involves mapping the reading materials to analyze passage situations that help readers of foreign languages learn more information. Additionally, critical one addresses assumptions and goes beyond having a straightforward meaning of the text (Singh, 2021).

Mind wandering occurred during reading process when reader’ attention go away from the main concern of the text. Reading comprehension is negatively correlated with mind-wandering occurrence (Schooler, Reichle, & Halpern, 2004). When the mind begins to wander the eye-mind link should be disrupted. Therefore, unfocused readers risk moving their sight away from the word before giving it the attention it deserves, skipping the extra fixation time it usually requires. In other
words, the movement of the eye ought to be slightly detached from active text processing as focus shifts from lines of text to inner thoughts, which will reduce sensitivity to lexical aspects including frequency of words. (Nuthmann & Engbert, 2009; Rayner & Fischer, 1996).

Instructors nowadays constantly employ technologies, various instructional strategies and models for enhancing EFL students’ reading comprehension skills of literary texts and reducing their mind wandering, such as Generative Learning Model (GLM).

GLM highlights learning and emphasis the activity of the apprentice during the learning process. This increases the learner's capacity to comprehend and connect information within any text. GLM rises when the apprentice applied numerous strategies to attain learning, and Generative education highlighted reducing dependence on the educator and generates more independence for the learner. Moreover, it affords a chance for the apprentice by unifying the study content, connecting the new content of the educational material with the prior knowledge of the students and producing ideas that work on developing reading comprehension skills (Osman, & Al-Shahrani, 2022).

Consistently, EFL instructors should seek teaching and learning through Generative learning model that enhance reading comprehension skills of literary texts and reducing mind wandering in their classes. Therefore, GLM will be applied in this study.

1.1. Context of the Problem

Out of the researchers’ experience of teaching courses at the Faculty of Education, they noticed that the majority of second year students enrolled in the primary English section face problems in EFL reading comprehension skills of these texts and have a mind-wandering problem when reading the literary texts. Additionally, a large number of students’ view most of literary texts as an ambiguous use of the English language. There are a number of variables which make studying literary works problematic for students. Initially because it makes references to social values, the kinds of relationships that people have with one another, religious beliefs, and philosophies that EFL students are unfamiliar with, the cultural aspect of literary works is the main source of difficulties. The historical setting of the literary texts presents a second challenge because EFL students are not often full aware of this context. Students’ poor language skills prevent them from truly understanding of literature, which is unusual. The lack of general
agreement on how to teach literary texts to EFL students adds to the current obstacles.

Moreover, the problem of mind wandering is highly predominant among second year English section students at the Faculty of Education, Benha University. The researcher had an interview with the English Majors, who mentioned that they have many reasons for mind wandering. They stated that they experienced varied degrees of spontaneous attentional and cognitive switching away from a core task. Additionally, they have a propensity to regale in various thoughts, which can disrupt the regularity of the ongoing activity.

In the Egyptian context, English language programs do not offer scholars with chances to practice EFL reading comprehension skills of literary texts in interactive situations. Consequently, numerous researchers attempted various studies to develop EFL reading comprehension skills of literary texts among scholars at different instructional phases. Previous scholars such as Omar, (2018) who used the contract learning strategy to develop EFL first graders reading comprehension skills. Whereas, Welson (2020) used DRTA strategy for enhancing EFL reading comprehension and meta cognitive awareness among faculty of Education students. The results revealed the effectiveness of DRTA strategy for enhancing EFL reading comprehension skills. El-Naggar (2020) used some modes for developing reading comprehension levels and cultural literacy among English Section Students at the Faculty of Education, Zagazig University. Abdelfattah(2021) designed a program based on text modification strategies for developing EFL reading comprehension skills among faculty of education students. Recently, Elnahas (2022) used mobile learning applications for developing EFL reading comprehension skills among student teachers at Faculty of Education.

To document the problem of the study, the researcher accomplished a pilot study on 30 students of second year English Majors, Faculty of Education, Benha University. The pilot study included an EFL reading comprehension skills test adopted from El-Nahas (2021) and mind wandering scale adopted from Mowlem, et.al.(2019). The pilot study was conducted through the first semester of the 2022/2023 academic year. First, the results of the pilot study indicated that the majority of the participants (84%) have a low level of EFL reading comprehension skills of literary texts. Moreover, they cannot analyze the characters’ main aspects of the literary text. Also,
they cannot draw conclusions about stated or unstated facts in the literary text and cannot infer the tone and mood of the author.

Second, the mind wandering scale aimed at detecting students who cannot prevent their distraction thoughts while reading any material. Its items were rated on a 5-point Likert scale alternating from Almost Never (1) to Almost Always (5). After investigating the apprentices’ responses on the scale items, it was indicated that the majority of the participants (84%) have marked as mind wandering readers. So the present study is an endeavor to use the GLM to develop second year English majors ‘Reading Comprehension skills of literary texts and reducing their mind wandering.

1.2. Statement of the Problem

Despite the prominence of EFL reading comprehension skills of literary texts, the second year students enrolled in Primary English Section, Faculty of Education, Benha University, lack these skills. Consequently, they cannot understand the literary texts and cannot get its main core. Moreover, they have many thoughts of distraction when reading literary texts, that hinder them to focus their attention. Consequently, the present study tries to aid them developing their EFL reading comprehension skills of literary texts and reducing their mind-wandering through using the GLM.

1.3. Questions of the Study

In an attempt to overcome this problem, the researchers tried to answer the following questions:

(a) What are the EFL reading comprehension skills of literary texts required for the Second –year English Majors?
(b) What is the form of a program based on the GLM for developing Second –year English Majors’ reading comprehension skills of literary texts and reducing their mind wandering?
(c) What is the effectiveness of using a program based on the GLM for developing Second –year English Majors reading comprehension skills of literary texts?
(d) What is the effectiveness of using a program based on the GLM for reducing Second –year English Majors’ mind wandering?

1.4. Hypotheses of the Study:

In the light of the review of literature and related studies, the following five hypotheses were formulated:

1- There is a statistically significant difference between the mean score of the experimental and control groups of the overall EFL reading
comprehension skills of the literary texts and its sub-skills on the post- administration of EFL reading comprehension skills of the literary texts test, in favour of the experimental group.

2- There is a statistically significant difference between the mean score of the experimental group in overall EFL reading comprehension skills of literary texts and sub-skills on the pre and post administration of EFL reading comprehension skills of the literary texts test, in favour of post-administration.

3- There is a statistically significant difference between the mean score of the experimental and control groups of the overall mind wandering on the post- administration of mind wandering scale, in favour of the control group.

4- There is a statistically significant difference between the mean score of the experimental group in overall mind wandering on the pre and post-administration of mind wandering scale, in favour of pre-administration.

5- There is a statistically significant negative correlational relationship between experimental group students’ scores in the post-assessment of the EFL reading comprehension skills of literary texts and their scores in the mind wandering scale.

1.5 Delimitations of the Study:
The present study was restricted to:
1. Second year, Primary English Majors, Faculty of Education at Benha University.
2. Some EFL reading comprehension skills of literary texts required for second year, Primary English Majors at Faculty of Education.
3. The first semester of the academic year 2022/2023.

1.6 Instruments and Materials:
The researchers designed and used the following instruments and materials:
1. An EFL reading comprehensions skills of literary texts checklist
2. EFL reading comprehension skills of literary texts tests (pre and post)
3. A Mind Wandering scale (Adapted from Mowlem, et.al., 2019).
4. A program based on the Generative Learning Model.
1.7 Significance of the study
The present study is important for:
1. **English Majors:**
   - It aids them to enhance some EFL reading comprehension skills of literary texts and reducing their mind wandering.
   - It affords them a program based on the generative learning model and practice its various strategies within the sessions.
2. **Curriculum planners:** it sheds light on the Generative Learning Model as an authentic and proficient instructional model.

1.8 Definition of Terms
**EFL Reading Comprehension Skills of Literary Texts:**
Reading comprehension skills of literary texts are operationally defined as second year, English Majors capacities to read and comprehend the literary texts through (identifying the main theme, the figurative language used, analyzing the characters’ main aspects and Inferring the mood and tone of the author in the literary text).

**Reducing Mind Wandering**
Reducing Mind Wandering is operationally defined as second year English Majors’ abilities to switch their thoughts off distraction when reading literary texts.

**Generative Learning Model (GL M):**
GLM is operationally defined in the current study as second year English Majors’ abilities to use the four main phases of {(1) exploration, (2) focusing, (3) challenge, and (4) the application phase) to develop their reading comprehension skills of Literary texts and reducing their mind wandering

2. Literature Review
Literary texts are essential for studying English language since they improve reading comprehension, increase cultural understanding, and inspire academics. The use of literary texts in EFL classrooms proved to have potential advantages that encourage the use of authentic materials, improve language proficiency, and broaden linguistic knowledge. As their main goal is "the revelation of creativity, of the knowledge of oneself and of others manifested by that language used in literary setting," literary texts are helpful for learning a language. Literary materials can best describe people and residences, situations and
circumstances, including inspiration that learners can comprehend as literature portrays universality (Khan, & Alasmari, 2018).

For better reading comprehension of literary materials, readers should assess what they have already read. Reading comprehension abilities are regarded as a foundation for recognition and clarification of existing meaning in literary texts. Additionally, people need to read literary works in order to deepen their perspectives. (Sirait, Hutauruk, & Herman, 2020). Van (2009), advocated for focusing on teaching literary texts in EFL classes because they help students acquire a rich vocabulary and reading comprehension skills while providing significant settings for using language. Furthermore, it promotes the students' communication skills.

Literary texts offer students artistic models of how to learn from cultural dimensions and allow them to effectively use grammar. Additionally, studies show that reading and responding to literary texts helps students communicate and perform more effectively while providing them with the best examples of English usage (Greef, Jenkins, & Comer, 2021). Reading becomes very significant skill in education field. The fundamental ideas in the text demand biological capacity to have an impact on cognition. Furthermore, the important ideas that students gain when reading books, article, journal and literary texts relate to the reading comprehension. It reflects how well scholars apprehend what they are reading in reading courses (Pacheco, Reis, Araújo, Inácio, Petersson, & Faísca, 2014).

The instructor who has a decent intention to develop the reading comprehension skills of his EFL learners, of course, can select and create a list of literary materials for his students which are stimulating and attractive (Isaqjon, 2022). Moreover, ( Mirzayev, & Oripova, (2022), emphasized that extensive reading helps to reinforce the apprentices reading competence and enrich their sense of independency as they are thought to read the materials of literary texts on their own at home.

A complicated cognitive skill that is necessary for learning and creating meaning is reading comprehension of literary texts. The ability to assemble meaning from the passages should be taught to apprentices. In order to obtain meaning through RC, L2 readers must engage with information resources and employ a variety of cognitive methods (Gilakjani and Ahmadi, 2011). Actually, comprehension is a collaborative intellectual process requiring language, global, and topical
knowledge. Additionally, it is a dynamic process that requires several considerations at once, including text schematic, contextual knowledge, lexical awareness, and grammatical awareness. Thus, it is obvious that L2 readers should apply reading techniques and background knowledge to derive the intended meaning. (Jeon & Yamashita, 2014).

Reading comprehension of literary texts is the students’ ability to create meaning from interacting with a text. It is so essential for learners to succeed in today's learning environments (Snow, 2002). Complex processes involved in reading comprehension need for the coordination of a variety of capabilities and knowledge (Kim, 2020). Reading comprehension of the literary texts include several sub-skills and phenomenon, such as (1) using the reader’s existed knowledge about the text to identify the main theme of the literary texts, (2) the meaning which comes from the context in the literary texts, (3) identifying the used figurative language in the literary text, (4) drawing conclusions about stated facts in the literary text, (5) inferring the mood and tone of the author in the literary texts. (Isaqjon, 2022).

There are several scholars who aimed to enhance EFL reading comprehension skills. Reading-aloud software (Text-to-speech) was utilized in Wood, Moxley, Tighe, and Wagner's (2018) study to improve pupils' reading comprehension abilities. Using this tool, enables learners to listen to written text while reading aloud. It converts written text into spoken text. The EFL reading comprehension test was one of the study tools. The findings supported the effectiveness of employing reading aloud software to help individuals with reading difficulties improve their reading comprehension. Future research implications and suggestions are discussed. Al Momani, (2020) elaborated how reading skills were improved by contemporary technological apps like Telegram Messenger. The EFL students of Ajloun University College are the subject of the study. The study's findings demonstrated how using Telegram as a social networking tool might help pupils' reading abilities.

Kim (2020) used (DIER) model that contains word reading, listening comprehension, text reading fluency, and background knowledge to enhance reading comprehension. The study sample consisted of 201 Korean-speaking first graders and revealed multi channeled direct and indirect effects of component skills. These results indicated the effectiveness of DIER model for developing reading comprehension. Fardin, Fatehi Rad, & Tajaddini, (2022) studied how
flipping the classroom affected Iranian intermediate EFL students' reading comprehension and grammar growth. 60 Iranian apprentices in intermediate EFL were chosen by the investigators. The two groups were then subjected to 14 sessions. According to the findings, intermediate Iranian EFL students' reading comprehension and grammar were significantly improved by flipped teaching.

Azizi, Namaziandost, and Rezai, (2022) studied how blogging and podcasting can improve the reading comprehension of advanced EFL students. Three groups—the control group, the blogging group, and the podcasting group—made up the study sample. Results demonstrated that at the conclusion of the treatments, the podcasting and blogging groups fared better than the control group. Additionally, the findings showed that there was no statistically significant distinction between the using blogs or podcast. The qualitative research showed that the participants had positive attitudes towards using podcasting.

Kassem, (2022) aimed to use the Literature Circles 2.0 model and determine its effects on developing English majors' comprehension skills of literary texts and online self-regulated language. The one-act play and four short stories in the Literary Reading course were taught using Literature Circles 2.0. Two tools were used to carry out the study's objective: Online Self-Regulated Language Learning Skills Questionnaire and Test of Literary Reading Comprehension Skills. There were 60 English majors in the study, divided into an experimental group and a control group. The results indicated the effectiveness of the literature circle 2.0 in developing reading comprehension of literary texts.

Silalahi, Herman, Sihombing, Damanik, & Purba (2022) aimed in their study to find out the students’ achievement by using HOTS as learning strategy in enhancing reading comprehension among university students. Data analysis was conducted through using interview with students and mobile videos. The result revealed the level of thinking skills of apprentices in answering HOTS level have achieved significant enhancement. The study recommended future research to inspire the cognition ability in sensory provinces of HOTS.

Research has shown that Mind Wandering is connected to both decreased recall for a text's contents and poorer inference-making when it comes to reading. For instance, participants in a prominent study by
Smallwood, McSpadden, Schooler, (2008) read a detective novel and then responded to a series of comprehension questions. Mind wandering (MW) is defined as a shift in focus away from a core activity towards internal information (Singer, 1975; Smallwood & Schooler, 2015). Storm and Bui (2016) claimed that MW has a negative impact on learning attainment and reading comprehension. A self-paced model is often used to investigate the effect of MW on reading, in which learners are forced to read a word, or paragraph of text and are asked to answer questions enquiring whether they were on- or off-task (Mooneyham & Schooler, 2013).

Soemer, Idsardi, Minnaert, & Schiefele, (2019) randomly drew a sample of secondary school students to determine factors affecting mind wandering while reading and their impact on comprehension. One hundred twenty-five eighth-graders read an expository text that was either easy, moderately tough, or difficult, and then responded to a series of comprehension questions. Overall, the findings were in line with the broader literature on mind wandering: harder texts were linked to less interest in the topic, greater mind wandering when reading, and poorer comprehension. Steindorf and Rummel, (2020) indicated in their research that, there is limited agreement on the particular scales that are sensitive to attentional decoupling during mind wandering: reading time, fixation count, and first-fixation duration—positively predicted self-categorization of mindless reading. Nevertheless, there was no evidence that these expectations of difficulties had any impact on either the subject's subjective reports of or the researcher's empirical measurements of mind wandering.

Recently, Bonifacci, Viroli, Vassura, Colombini, & Desideri, (2023) aimed in their meta-analysis research to assess the connection between MW and RC while taking into account the characteristics of the participants and the text as well as methodological concerns in the measurement of the two variables. The correlation between MW and RC had an average significant change of 0.30 when trait-based questionnaires were used instead of online probes to evaluate MW, resulting in a null association. Age had a substantial impact as well, with more unfavorable associations as people aged.

To sum up, research on MW during reading indicates that it negatively affects comprehension and that MW during reading is inversely connected to topic interest and text difficulty. An important
mediator process in the typically positive association between topic interest and reading comprehension.

Thus, in light of reviewing studies that dealt with the reading comprehension skills of literary texts and mind wandering, it can be concluded that, mind wandering negatively affect students’ performance in EFL reading comprehension skills of literary texts. Therefore, the present study researchers designed a program based on the GLM for developing reading comprehension skills of literary texts and reducing mind wandering among English Majors.

GLM is one of the most well-known models that focused on the development of the learner's cognitive and mental abilities. It is based on the idea that learning should be fun and dynamic, requiring students to reflect on their past experiences and connect them to what they are learning in order to come up with original ideas. It incorporates mental processes that the brain generates as a result of learning or overcoming difficulties in daily life. Information is produced when using cognitive and metacognitive processes because of their social nature. (Solomon, 2015). Consequently, it enables learners to apply their previous knowledge to attain the new contexts. (Fiorella, & Mayer, 2016).

GLM is a functional learning instructional model which is constructed on knowledge of brain and cognitive practices in comprehension, obtaining knowledge, inspiration, and transferal. It required the scholars to learn individually, discover their data from numerous learning bases, emphasis on the problem detected, conduct a research to formulate notions which had been attained, and apply them to the daily situations. Apprentices were not only unresponsively listening to the instructor’s justification orally, but also detecting the principal of the content individually so that all accomplishments carried out by the learners were focused on constructing the knowledge through discovery (Prawita ,& Prayitno, 2019).

Osborne and Wittrock (1985) introduced the term "GLM". It described a methodology in which the teacher gives apprentices a prompt or sequence of prompts to accomplish tasks that demand the active development of: 1) Significant connections between new material and prior knowledge, and 2) Major interconnections between recently learned ideas (Wittrock,1991). Moreover, Basaffar (2017), indicted that GLM combined techniques to encourage students to actively form the connections that make sense of the content material. According to the
model, learning is the result of interactions between subject matter and students' prior knowledge, motivating processes, learning processes, knowledge production processes, and generating processes through subject-matter concepts. The theory's four basic parts are memory, integration, organization, and expansion.

There are several purposes for using the generative learning model (Obaid ,2013). It permits scholars to consider ideas on their own in a free association way, which results in creativity in solving problems in a broadest sense, and encourages students to respect the opinions of others and achieves self-assurance, self-esteem and appreciation. Moreover, it stimulates active learning and transfers the learner from just passive listener of knowledge to active participant in its attainment.

The foundation of the generative learning theory has its roots in Bartlett's (1932) conception of learning as a performance of construction structures or schemas. Additionally, it is related to Piaget's (1926) theory of cognitive development, which recognized the process of learning to integrate and adapt new information to current designs. The cognitive revolt also encourages research on information processing models of memory, particularly as applied to text comprehension (Kintsch and van Dijk 1978) and the structured nature of knowledge (Ausubel, 1960). These studies have all influenced generative learning theory. All the previously mentioned theories support the notion that human learning and memory are productive and can be transferred to a new situation.

The GLM places a strong emphasis on students constructing their own knowledge. They actively engage in the learning process based on the previous knowledge they already possess (Fiorella & Mayer, 2016). It consists of four learning stages, the first is exploration, during which the educator presents a variety of straightforward concepts found in daily life rather than teaching the subject that would be practiced in class. The second phase focused on the attention and requires pupils to concentrate on something associated with the principles being taught. After investigating numerous topics, students are asked to distil what they learned. Third, the instructor presents a difficult problem because the problem given cannot be solved. Fourth, the application of concepts is an essential part of the generative learning model.

Sarani and Jabbari, (2010) examined how two generating strategies: summarization and question generation have affected EFL
learners’ reading comprehension and recall of literary texts. The participants were 63 university students. The results indicated the effectiveness of the generative strategies in developing reading comprehension of literary texts. Safarpoor, Ghaniabadi, and Nafchi, (2015) examined the effect of self-questioning strategy as a generative learning strategy on the Iranian learners’ EFL reading comprehension. The study sample consisted of seventy-five undergraduate students from two universities. The results indicated that the use of the self-questioning strategy has a significant effect on the readers’ comprehension skills and their motivation.

Chistella and Soekamto, (2017) conducted a quasi-experiment treatment in Malang Indonesia's Senior High School 7 for investigating the effect of the generative learning model on HOTS. The first group received instruction using the GLM, and the second received instruction using the CORE learning model. The HOTS test was used to determine the learners' HOTS. Three weeks were spent on the program. The study's findings revealed a substantial difference between the experimental groups' increase score points. The outcomes also demonstrated that the generative learning model had a greater average of learners' HOTS points than the other group.

At King Abdulaziz University, Basaffar (2017) determined the impact of using a few (GLM) strategies when teaching English as a foreign language to foundation year students. The study included 120 female English language students in total. A control group and an experimental group were selected from them. The two groups took a pre-test on reading comprehension to assess their reading comprehension skills. The usage of GLM techniques such as paraphrasing, coming up with questions and titles, mind-mapping, and creating visuals was taught to the apprentices. Results showed that, when the GLMQs were taken into account, pupils' reading comprehension skills had significantly improved.

Masoud, (2020) examined how well a GLM helped aspiring EFL teachers strengthen their analytical reading and writing skills. The research design used was a quasi-experimental pretest-posttest control group design. The study's tools included a pre-post critical reading exam (CRT), a pre-post critical writing test (CWT), a language instruction GLM-based program, and critical reading and writing questionnaires.
The experimental group greatly outperformed the control group on the post-tests.

Elhagga, (2021) investigated the effect of Using GLM to develop Preparatory Stage Pupils’ EFL Reading Skills. The participants were 68 pupils randomized into experimental group and control one. The experimental group received instruction using the Generative Learning Model, whereas the control group received normal instruction. The study used a pre-posttest quasi-experimental design. The researcher developed a pre-posttest that assessed participants' reading skills before and after the intervention. The outcomes showed that utilizing the Generative Learning Model improved the reading abilities of EFL prep stage students.

Recently, Osman and Al-Shahrani (2022) investigated the effectiveness of using the generative model in learning synonyms and antonyms in English language course for secondary stage apprentices in Bisha governorate. The researchers used the quasi-experimental design. The study sample consisted of forty-eight female secondary stage scholars. The results indicated the effectiveness of GLM in enhancing the synonyms and antonyms of the experimental group.

Thus, in light of reviewing studies that dealt with reading comprehension and mind wandering, it can be concluded that it has become a major target for foreign language instruction. Thus, developing English majors’ reading comprehension skills of literary texts and reducing their mind wandering enables learners to become more mindful readers within literary materials.

3- Method

This section examined the research methodology that has been followed in determining the effectiveness of using the GLM in developing reading comprehension of literary texts and reducing mind wandering among second year English majors, Faculty of Education, Benha university. The methodology encompasses the next items:

1) Participants

The participants of the present study consisted of 69 second year English language section students at Faculty of Education, Benha University during the first semester of the academic year 2022-2023.
They were distributed into two groups; an experimental group (N=33) and a control group (N= 36) as shown in Table (1). The experimental group was taught using the GLM, while the control group was taught by the traditional instruction.

**Table (1) The participants of the study**

<table>
<thead>
<tr>
<th>Group</th>
<th>Control</th>
<th>Experimental</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>36</td>
<td>33</td>
<td>69</td>
</tr>
<tr>
<td>Post</td>
<td>36</td>
<td>33</td>
<td>69</td>
</tr>
</tbody>
</table>

**Homogeneity of the groups:**

The experimental and control groups were homogeneous before conducting the experiment as they include scholars having approximately the same age range (20-21 years) and they are from homogenous economic and social levels. To confirm that both groups were similar in the EFL reading comprehension and mind wandering, EFL reading comprehension skills of literary texts test and mind wandering scale were applied to the experimental group and the control group before implementing the treatment. Mean, standard deviation and "t" value of the two groups were calculated.

**Table (2): t-value and Level of Significance in the Pre-administration of EFL reading comprehension skills of literary texts test between the experimental group and the control group**

<table>
<thead>
<tr>
<th>Skills</th>
<th>Group</th>
<th>No.</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>DF</th>
<th>α Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Experimental</td>
<td>33</td>
<td>0.79</td>
<td>1.11</td>
<td>0.179</td>
<td>67</td>
<td>0.859</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36</td>
<td>0.83</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Experimental</td>
<td>33</td>
<td>1.15</td>
<td>1.33</td>
<td>0.210</td>
<td>67</td>
<td>0.834</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36</td>
<td>1.22</td>
<td>1.45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Experimental</td>
<td>33</td>
<td>0.85</td>
<td>1.00</td>
<td>0.806</td>
<td>67</td>
<td>0.423</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36</td>
<td>1.06</td>
<td>1.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Experimental</td>
<td>33</td>
<td>1.03</td>
<td>1.13</td>
<td>1.215</td>
<td>67</td>
<td>0.229</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36</td>
<td>0.72</td>
<td>0.97</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Experimental</td>
<td>33</td>
<td>0.97</td>
<td>1.13</td>
<td>0.117</td>
<td>67</td>
<td>0.907</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36</td>
<td>1.00</td>
<td>1.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Experimental</td>
<td>33</td>
<td>0.48</td>
<td>0.87</td>
<td>1.667</td>
<td>67</td>
<td>0.100</td>
</tr>
</tbody>
</table>
Table (2) indicates that there is no significant difference between the mean scores of the experimental and control groups on the overall EFL reading comprehension skills of literary texts and its sub-skills, where "t" value for the overall skills is (0.107) which is not significant at (0.05) level of significance. This means that the two groups are equivalent in their EFL reading comprehension skills of literary texts before implementing the treatment. Also, to make sure that both groups were equal in mind wandering, mind wandering scale was administered to the two groups before applying the treatment. Mean, standard deviation and "t" value of the two groups were considered.

Table (3): t-value and Level of Significance in the Pre-administration of the mind wandering scale between the experimental group and the control group

<table>
<thead>
<tr>
<th>Group</th>
<th>No.</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>DF</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>33</td>
<td>59.61</td>
<td>3.75</td>
<td>1.035</td>
<td>67</td>
<td>0.305</td>
</tr>
<tr>
<td>Control</td>
<td>36</td>
<td>58.69</td>
<td>3.57</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (3) shows that there is no significant difference between the mean scores of the experimental and control groups in the mind wandering pre-administration, where "t" value is (1.035), which is not significant at (0.05). This means that the two groups are equivalent in mind wandering before implementing the program.

Tables (2) and (3) clarify that no statistically significant difference was found between the two groups in the pre-administration of the EFL reading comprehension skills test and the mind wandering scale. Accordingly, it was ensured that both groups were equivalent in their
entry level of reading comprehensions skills and mind wandering before the experimental treatment.

2) Design

The present study is mainly quantitative and qualitative. Its design is quasi-experimental which is based on manipulating the independent variable and measuring its effectiveness on the dependent variable. The descriptive approach was used to identify the important EFL reading comprehension skills of literary texts suitable for second year, English majors at Faculty of Education, Benha University, in light of the comprehensive literature analysis. A pre- post control group design was used. The two groups were tested before and after the treatment. In addition, the quasi-experimental design was used to detect the impact of using the GLM for developing EFL reading comprehension skills of literary texts and reducing the mind wandering among second year English major students at Faculty of Education, Benha University.

Figure (2): The Experimental Design of the Study

Pre- Test Groups of the study Experimentation Post-Test

3) Instruments of the study

This study aimed at using the GLM for developing EFL reading comprehension skills of literary texts and reducing mind-wandering among second year primary English language section students at Faculty of Education, Benha University. The subsequent instruments and materials were developed by the researchers to accomplish the purpose of the study:

A. An EFL reading comprehension skills of literary texts checklist.
B. An EFL pre-post reading comprehension skills of literary texts test.
C. A Mind-Wandering scale (Adapted from Mowlem, et.al., 2019).

D. Generative Learning Model - based program.

**A- The EFL Reading Comprehension Skills of literary texts Checklist**

First, the researchers reviewed the previous literature about EFL reading comprehension skills of literary texts (Van, 2009; Snow, 2002; Harmer, 2004; Khan, & Alasmari, 2018 and Kassem, 2022). At the beginning, the researchers prepared an EFL reading comprehension checklist that consisted of 13 skills. The initial checklist was presented to a panel of jury members to identify the suitability of the chosen EFL reading comprehension skills of literary texts to second-year English Majors at the Faculty of Education. Then reviewers omitted 5 skills as they were repeated in other previous skills. Therefore, the EFL reading comprehension skills checklist was set in its final form that consisted of eight main skills (Appendix A).

**B- EFL Reading Comprehension Skills of Literary Texts Test : (pre-post test)**

After reviewing literature and assigning the checklist in its final form, the researchers prepared the EFL reading comprehension skills of literary texts Test. The test consisted of two parts. Each part included a short story, followed by some questions to assess second-year English majors’ reading comprehension skills of literary texts. Thirty-two marks were divided among the eight EFL reading comprehension skills of literary texts. The researchers asked the participants to read the short stories and choose the correct answers for the below questions.

(See Appendix. (B) for the EFL reading comprehension skills of literary texts test)

- **Validity of EFL Reading Comprehension Skills of Literary Texts Test:**

**A- Face validity of Reading Comprehension Skills of Literary Texts Test:**

The test was submitted to a panel of jury members in EFL curricula and instruction (7) to determine its face validity (see appendix D). They were asked to comment on the following issues: the test's clarity of instructions, its appropriateness for the students' level, and the accuracy of its questions. The jury members reported on the test items' appropriateness to the skills that were being evaluated. The test's suitability for the academic level of the pupils was reported.
Additionally, it was reported that the test's instructions and questions were simple, and that it demonstrated the needed competencies.

**B-The internal consistency validity of EFL reading comprehension skills of literary texts test:**

To estimate the internal consistency validity of the EFL reading comprehension skills of literary texts test, the internal consistency was calculated through using the SPSS V.18. The researchers calculated the Pearson Correlation coefficient of students’ score in each skill and their total score of the test as a whole. The correlation coefficient and the significance level are presented in the following table.

Table (4) Values of the Correlational Validity Coefficients for each skill and the total score targeted by Reading Comprehension Test.

<table>
<thead>
<tr>
<th>item</th>
<th>Correlation</th>
<th>item</th>
<th>Correlation</th>
<th>item</th>
<th>Correlation</th>
<th>item</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.656**</td>
<td>2</td>
<td>0.730**</td>
<td>3</td>
<td>0.763**</td>
<td>4</td>
<td>0.684**</td>
</tr>
<tr>
<td>5</td>
<td>0.705**</td>
<td>6</td>
<td>0.729**</td>
<td>7</td>
<td>0.637**</td>
<td>8</td>
<td>0.733**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level

According to the table, the correlation coefficient for each skill of the test and the total score of the whole test was statistically significant at (0.01). This indicates that the EFL reading comprehension test was a valid instrument regarding its internal consistency and all its items were assigned to attain its main purpose.

- **Reliability of the EFL reading comprehension Skills of literary texts Test:**

For approximating the reliability of The EFL reading comprehension skills of literary texts test, the researchers used the following two methods:

(A) **Test-Retest Method:**

A random sample of 30 second-year English majors from the Benha University Faculty of Education administered the test. After two weeks, the same group was given the test once more. Table (5) shows the Pearson correlation coefficient for each test item throughout the two administrations as well as for the entire test.
Table (5): Reliability of the EFL Reading Comprehension Skills of literary texts test

<table>
<thead>
<tr>
<th>Skills</th>
<th>Skill 1</th>
<th>Skill 2</th>
<th>Skill 3</th>
<th>Skill 4</th>
<th>The overall skills of The Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation</td>
<td>0.804**</td>
<td>0.798**</td>
<td>0.731**</td>
<td>0.853**</td>
<td></td>
</tr>
<tr>
<td>Skills</td>
<td>Skill 5</td>
<td>Skill 6</td>
<td>Skill 7</td>
<td>Skill 8</td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>0.864**</td>
<td>0.772**</td>
<td>0.695**</td>
<td>0.754**</td>
<td>0.927**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level

Accordingly, as the previous table shows, the values of the correlation coefficients are high and all of them are significant at (0.01). This means that the test is highly reliable.

b. Cronbach’s Alpha Method

Cronbach’s alpha was also used to measure the reliability of the EFL reading comprehension skills of literary texts test. The Alpha coefficient of the EFL reading comprehension skills test is 0.80. Since "it is appropriate [with alpha coefficient] to have a reliability coefficient of 0.70 or higher." (Wells & Wollack, 2003:4), the value demonstrated here is acceptable revealing that the EFL reading comprehension test is reliable and has internal consistency.

- Scoring and Piloting the EFL reading comprehension skills of literary texts Test:

The EFL reading comprehension skills of literary texts test consists of two long short stories, with 16 MC questions (closed questions); wherein the correct response was given two marks. Therefore, the total score for the test was 32 marks. The test was administered to 30 students, other than the study participants by the end of the second semester of the 2021/2022 academic year to determine the clarity of the test instructions; suitability of the test to the students' level, and duration of the test. The time of the test was measured as 48 minutes.

B – The Mind Wandering Scale:
-Aim and description of the Mind Wandering scale:

The current study researcher adapted (Mowlem, et al., 2019) scale of mind wandering to measure the mind wandering among second year English majors at Faculty of Education, Benha University, Egypt (see appendix C). It was used as a pre-post scale (applied before and after implementing the program). Each item is constructed to get English
majors’ responses through a continuum that is based on the five-point Likert scale. The scale consists of (15) items with five options for each item. The options were: Almost never, somewhat infrequently, somewhat frequently, Very frequently and Almost Always. Score assigned to the responses were 1, 2, 3,4 and 5. This scale required students to rate their mind wandering. There is no right answer for any statement. The best answer is what they see. Items are statements to which students' responses are (1= Almost never, 2 = Somewhat infrequently, 3 = Somewhat frequently, 4 = Very frequently,5 = Almost Always). Since the scale has 15 items, the maximum grade that any student can get is 75. The mind wandering scale was applied to all 69 participants before and after the treatment to track changes in students’ mind wandering.

The Validity of the Mind Wandering Scale:

- Face validity of the Mind Wandering Scale: To estimate the mind wandering scale validity, the clarity of items and the suitability of the scale items to the students' level and background, the scale was submitted to seven Jury members. Some adjustments to some substances that not related to students have been changed. The jury panel emphasized that the scale items were valid.

- Internal consistency validity of the Mind Wandering Scale: The internal consistency of the mind wandering scale was determined by calculating the consistency between the total score of each item of the scale and the total score of the scale as a whole. It was measured by using the Pearson Correlation Coefficient. The correlation coefficient and the significance level are presented in Table (7) as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.473**</td>
</tr>
<tr>
<td>2</td>
<td>0.382*</td>
</tr>
<tr>
<td>3</td>
<td>0.501**</td>
</tr>
</tbody>
</table>

According to the previous table, the correlation coefficient for each item of the scale and the total score of the whole scale was statistically significant at (0.05) & (0.01). This indicates that the mind wandering scale was a valid instrument regarding its internal consistency.
and all its items and dimensions were assigned to achieve its central purpose.

- **The Reliability of The Mind Wandering Scale:**
  For approaching the reliability of the mind wandering scale, the researcher used the following two methods:

  **(A) Test-Retest Method:**
  The scale was administered to a random sample of third year English language section students at Faculty of Education, Benha University, (n=30) during the second semester of the academic year (2021-2022). The scale was applied again to the same group after two weeks. The Pearson correlation coefficient between the two administrations was (0.894)

  **b. Cronbach’s Alpha Method**
  Cronbach’s alpha was also used to assess the reliability of the mind wandering scale. The Alpha coefficient of the mind wandering scale was calculated to the main items of the scale and the total score of the scale as a whole. The value of the Alpha coefficient (0.862) confirmed here to be acceptable. revealing that the mind wandering scale is reliable and has internal consistency. It revealed that the mind wandering scale is reliable and has internal consistency.

**Experimentation**

**Pre-administration**
After selecting the participants of the study, the EFL reading comprehension skills and the mind wandering scale were pre-administered to them during the first semester of the academic year 2022/2023 at Faculty of Education, Benha University.

**Experimentation**
The program based on the GLM, that was administered to the members of the experimental group to enhance their EFL reading comprehension skills of literary texts and reducing their mind wandering. The experimental treatment took place within the practical hours of the Drama and Child Theater Course delivered for second year, English majors at the Faculty of Education, Benha University. The first session of the experimentation was 50 minutes’ orientation and introductory session that aimed to familiarize the participants with EFL reading comprehension and mind wandering. The other sessions of the experiment were devoted to teaching the participants through the
Generative learning model-based program. The experiment continued for ten weeks.

The program focused on developing some EFL reading comprehension skills of literary texts and reducing mind wandering based on the Generative learning model-based program. The program consisted of 16 sessions that were based on using tasks and activities based on the strategies of the generative learning model in each session. Each session of the program included several tasks that addressed the main stages of the GLM within literary texts (short stories).

Gradually, a change was noticed in the participants’ beliefs about the importance of EFL reading comprehension skills of literary texts and reducing the mind wandering. Additionally, they became more excited to exercise extra-curricular activities. Each session of the program was devoted to develop one or two EFL reading comprehension sub-skills of literary texts and reducing their mind wandering.

Post administration

After implementing the program based on the GLM, Post - administration of the study instruments took place at the end of the first semester of the academic year 2022/2023.

C-Generative Learning model- Based Program (GLMBP)

The Generative learning-based program was designed to develop EFL reading comprehension and reducing mind wandering of second year English majors at Benha Faculty of Education and providing them with some theoretical and practical activities about EFL reading comprehension skills and strategies in reading to reduce their mind wandering.(See Appendix E)

a- Objectives of the program

The Generative learning model -based program was designed to improve EFL reading comprehension skills of literary texts and reducing mind wandering of second year English majors, Faculty of Education at Benha University.

The researcher applied variety of activities, assignments and tasks through the sessions to permit the participants complete the program objectives. By the end of the program, students will be able to:

- Identify the importance of generative learning -based program in EFL learning.
- Accomplish the prominence of EFL reading comprehension skills of literary texts to them as EFL apprentices.
• Enhance some EFL reading comprehension sub-skills of literary texts
• Reduce Mind wandering through the program resources and responsibilities.
• Generate a motivating and entertaining classroom environments by breaking the tediousness of classroom techniques through a generative learning model-based program.

b- Content of the Program
The program included various tasks and activities that based on the GLM to enhance English majors’ reading comprehension and reducing their mind wandering. The program was adapted from abundant of sources such as associated studies and books as the following:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>Al-Jarf, (2021)</td>
</tr>
<tr>
<td>2-</td>
<td>Kassem(2022)</td>
</tr>
<tr>
<td>3-</td>
<td>Nuthmann &amp; Engbert, (2009)</td>
</tr>
<tr>
<td>4-</td>
<td>Fiorella &amp; Mayer (2016)</td>
</tr>
<tr>
<td>5-</td>
<td>Lovett (2019)</td>
</tr>
<tr>
<td>6-</td>
<td>Alzahrani (2018)</td>
</tr>
<tr>
<td>7-</td>
<td>Basaffar (2017)</td>
</tr>
<tr>
<td>8-</td>
<td>Elhagga (2021)</td>
</tr>
</tbody>
</table>

C- Description and Framework of the program
The program consisted of 16 sessions. The opening session was orientation one about the sub-skills of EFL reading comprehension skills of literary texts and how to enhance them and the dimensions of mind wandering scale and how to reduce it among the participants of the study. The followed sessions were instructional ones through which the EFL reading comprehension sub-skills were practiced through various literary texts (short stories). Moreover, there were two sessions for revision (the sub-skills of reading and the items of mind wandering). Each one of the revision sessions was practiced and presented after the final practice of four skills, as a sort of formative assessment to the program. (See Appendix E).

D- Phases of the Generative Learning Model-Based Program (ULBP)
The present study was administered to second year English majors at the Faculty of Education, Benha University, during the first semester of academic year of 2022–2023. The major principles of generative learning model-based program were collected through reviewing the related literature dealt with the generative learning, activities and its practical applications. The program goes through certain principles as follows:
1. **Exploration Phase:** The teacher uses a variety of questions to assess his students' understanding of the topic by having them respond either orally or in writing using a variety of techniques.

2. **Focus Phase:** After each student has responded individually to the questions, the lecturer divides them into groups. The instructor requests that the students discuss the data that was gathered during the preparation phase. The observations and conclusions drawn by the pupils are later examined.

3. **Challenge Phase:** The text is provided by the teacher. The instructor talks, explains, and leads them. The worksheet's exercises have been completed by the participants. These activities provide students the knowledge they're missing and help them connect it to what they already know. They either revise or complete their information.

4. **Application Phase:** Participants attempt to put their newly acquired information to use. They created concept maps, diagrams, and paraphrases, according to the instructor’ directions. The main goal of the evaluation was to help students connect their prior knowledge to the new information. Participants are urged to organize and consolidate all of the generations of relationships into a coherent and integrated meaning and to assess how well these exercises have improved their comprehension.

**6- Findings of the study**

In order to answer the study questions and in light of the quantitative results of the post administration of the EFL reading comprehension skills of literary texts test and mind wandering scale to the study groups (the experimental and the control), this section presents the results in light of the study's hypotheses using the Statistical Package for Social Sciences (SPSS), Version 18. The findings are stated as follows:

**6.1-Testing Hypothesis (1)**

1- The first hypothesis states that “There is a statistically significant difference between the mean score of the experimental and control groups of the overall EFL reading comprehension skills of the literary texts and its sub-skills on the post- administration of EFL reading comprehension skills of the literary texts test, in favour of the experimental group.

The independent sample T-test was used to compare the mean scores of the control group and experimental one in overall EFL reading
comprehension skills and sub-skills on the post administration of EFL reading comprehension skills of literary texts test. To calculate the total effect size of the experimental treatment on the reading skills as a whole, the effect size ($\eta^2$) was calculated. Table (8) presents the mean scores, standard deviation and level of significance.

**Table (8):"t" test between the mean score of the experimental group and the control group in overall EFL reading comprehension skills and sub-skills**

<table>
<thead>
<tr>
<th>Skills</th>
<th>Group</th>
<th>No.</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>DF</th>
<th>$\alpha$ Sig</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Experimental</td>
<td>33</td>
<td>3.45</td>
<td>0.90</td>
<td>11.305</td>
<td>67</td>
<td>0.01</td>
<td>0.656</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36</td>
<td>1.03</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Experimental</td>
<td>33</td>
<td>3.21</td>
<td>0.99</td>
<td>6.491</td>
<td>67</td>
<td>0.01</td>
<td>0.386</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36</td>
<td>1.36</td>
<td>1.33</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Experimental</td>
<td>33</td>
<td>3.33</td>
<td>1.19</td>
<td>7.750</td>
<td>67</td>
<td>0.01</td>
<td>0.473</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36</td>
<td>1.31</td>
<td>0.98</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Experimental</td>
<td>33</td>
<td>3.39</td>
<td>1.06</td>
<td>8.387</td>
<td>67</td>
<td>0.01</td>
<td>0.512</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36</td>
<td>1.31</td>
<td>1.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Experimental</td>
<td>33</td>
<td>3.64</td>
<td>0.93</td>
<td>7.193</td>
<td>67</td>
<td>0.01</td>
<td>0.436</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36</td>
<td>1.56</td>
<td>1.40</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Experimental</td>
<td>33</td>
<td>3.51</td>
<td>0.87</td>
<td>9.084</td>
<td>67</td>
<td>0.01</td>
<td>0.552</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36</td>
<td>1.53</td>
<td>0.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Experimental</td>
<td>33</td>
<td>3.64</td>
<td>0.93</td>
<td>7.416</td>
<td>67</td>
<td>0.01</td>
<td>0.451</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36</td>
<td>1.72</td>
<td>1.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Experimental</td>
<td>33</td>
<td>3.88</td>
<td>0.48</td>
<td>6.752</td>
<td>67</td>
<td>0.01</td>
<td>0.405</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36</td>
<td>2.11</td>
<td>1.43</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>Experimental</td>
<td>33</td>
<td>28.06</td>
<td>2.21</td>
<td>31.313</td>
<td>67</td>
<td>0.01</td>
<td>0.936</td>
</tr>
<tr>
<td>Test</td>
<td>Control</td>
<td>36</td>
<td>11.92</td>
<td>2.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (8) indicates that there is a statistically significant difference between the means of the control group and experimental groups' scores on the post-application of EFL reading comprehension test for the EFL reading comprehension overall skills. All the t-values are significant at 0.001 level in favour of the experimental group. This indicates that the experimental group's EFL reading comprehension skills have been developed. Therefore, the first main hypothesis was confirmed.

In addition, the effect size ($\eta^2$) of the experimental treatment on the overall reading comprehension skills ranged from (0.405-0.936) that
was high and appropriate value. This indicates that a large proportion of the
difference is due to the experimental treatment. Thus, there is a
highly significant effect of the experimental treatment on the
development of the overall reading comprehension skills. Figure (3 &4)
shows these differences in a visual form.

Figure (3) The Statistical Representation of the Study Participants' Mean
Scores of reading comprehension sub-skills on the Post administration of the
reading comprehensions skills of literary texts test.

Figure (4) The Statistical Representation of the Study Participants' Mean
Scores of reading comprehension overall skills on the Post administration of the reading comprehension skills of literary texts test.

Testing Hypothesis (2)

The second hypothesis states that “There is a statistically significant difference between the mean score of the experimental group in overall EFL reading comprehension skills of literary texts and sub-skills on the pre and post administration of EFL reading comprehension skills of the literary texts test, in favour of post-administration.

For testing this hypothesis, the Paired-Samples T-Test was used to compare the mean scores of the experimental group in overall EFL reading comprehension skills and sub-skills on the post administration of EFL reading comprehension skills test. To calculate the total effect size of the experimental treatment on the reading skills as a whole, the effect size (η2) was calculated. Table (10) presents the mean scores, standard deviation and level of significance.

Table (10): "t" test between the mean score of the experimental group in EFL overall EFL reading comprehension skills and sub-skills in the pre and post administration

<table>
<thead>
<tr>
<th>Skills</th>
<th>Test</th>
<th>No.</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>DF</th>
<th>α</th>
<th>Sig</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pre</td>
<td>33</td>
<td>0.79</td>
<td>1.11</td>
<td>10.407</td>
<td>32</td>
<td>0.01</td>
<td>0.772</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>33</td>
<td>3.45</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Pre</td>
<td>33</td>
<td>1.15</td>
<td>1.33</td>
<td>7.311</td>
<td>32</td>
<td>0.01</td>
<td>0.626</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>33</td>
<td>3.21</td>
<td>0.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Pre</td>
<td>33</td>
<td>0.85</td>
<td>1.00</td>
<td>11.626</td>
<td>32</td>
<td>0.01</td>
<td>0.809</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>33</td>
<td>3.33</td>
<td>1.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Pre</td>
<td>33</td>
<td>1.03</td>
<td>1.13</td>
<td>8.399</td>
<td>32</td>
<td>0.01</td>
<td>0.688</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>33</td>
<td>3.39</td>
<td>1.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5</td>
<td>Pre</td>
<td>33</td>
<td>0.97</td>
<td>1.13</td>
<td>11.065</td>
<td>32</td>
<td>0.01</td>
<td>0.793</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>33</td>
<td>3.64</td>
<td>0.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Pre</td>
<td>33</td>
<td>0.48</td>
<td>0.87</td>
<td>14.072</td>
<td>32</td>
<td>0.01</td>
<td>0.861</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>33</td>
<td>3.51</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Pre</td>
<td>33</td>
<td>1.27</td>
<td>1.40</td>
<td>8.399</td>
<td>32</td>
<td>0.01</td>
<td>0.688</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>33</td>
<td>3.64</td>
<td>0.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Pre</td>
<td>33</td>
<td>1.03</td>
<td>1.42</td>
<td>10.333</td>
<td>32</td>
<td>0.01</td>
<td>0.769</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>33</td>
<td>3.88</td>
<td>0.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Over</td>
<td>Pre</td>
<td>33</td>
<td>7.58</td>
<td>1.98</td>
<td>51.321</td>
<td>32</td>
<td>0.01</td>
<td>0.988</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>33</td>
<td>28.06</td>
<td>2.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
According to table (10), there is a statistically significant difference \((\alpha \leq 0.01)\) between the mean scores of the study participants of the experimental group in the overall reading comprehension skills and sub-skills, on the pre-post administration of the EFL reading comprehension skills in favour of the post-assessment. Thus the second hypothesis was verified. In addition, the effect size \((\eta^2)\) of the experimental treatment on the overall reading comprehension skills ranged from \((0.626-0.988)\) that was high and appropriate value. This indicates that a large proportion of the difference is due to the experimental treatment. Thus, there is a highly significant effect of the experimental treatment on the development of the overall reading comprehension skills and its sub-skills. Figure (5 &6) shows these differences in a visual form.

![Figure 5](image.png)

**Figure (5)** The Statistical Representation mean score of the experimental group in EFL reading comprehension sub-skills in the pre and post administration
Testing Hypothesis (3)

-The third hypothesis states that” There is a statistically significant difference between the mean score of the experimental and control groups of the overall mind wandering on the post-administration of mind wandering scale, in favour of the control group.

For testing this hypothesis, the independent sample T-test was used to compare the mean scores of the control group and experimental one in overall items of mind wandering on the post-administration of mind wandering scale. To calculate the total effect size of the experimental treatment on the mind wandering skills as a whole, the effect size ($\eta^2$) was calculated. Table (11) presents the mean scores, standard deviation and level of significance.

Table (11): “t” test between the mean score of the experimental group and the control group in overall mind wandering

<table>
<thead>
<tr>
<th>Group</th>
<th>No.</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>DF</th>
<th>$\alpha$</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>33</td>
<td>25.88</td>
<td>3.06</td>
<td>40.389</td>
<td>67</td>
<td>0.01</td>
<td>0.961</td>
</tr>
<tr>
<td>Control</td>
<td>36</td>
<td>57.61</td>
<td>3.43</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to table(11), there is a statistically significant difference($\alpha \leq 0.01$) between the mean scores of the study participants of the experimental group and control group in the overall items of mind wandering, on the post.
administration of the mind wandering scale in favour of the post-assessment. Thus the third hypothesis was verified. In addition, the effect size ($\eta^2$) of the experimental treatment on reducing the mind wandering was (961) that was high and appropriate value. This indicates that a large proportion of the difference is due to the experimental treatment. Thus, there is a highly significant effect of the experimental treatment on the reducing of overall items of mind wandering. Figure (7) shows these differences in a visual form.

![Figure (7) The Statistical Representation means score of the experimental group and control group in the mind wandering scale in the post administration](image)

**Testing Hypothesis (4)**

The fourth hypothesis states that “There is a statistically significant difference between the mean score of the experimental group in overall mind wandering on the pre and post-administration of mind wandering scale, in favour of pre-administration.

For testing this hypothesis, the Paird-Samples T-Test was used to compare the mean scores of the experimental in overall mind wandering and its items on the pre-post administration of mind wandering scale. To calculate the total effect size of the experimental treatment on the mind wandering as a whole and its items, the effect size ($\eta^2$) was calculated.
Table (12) presents the mean scores, standard deviation and level of significance.

Table (12): "t" test value between the mean score of the experimental group in the overall mind wandering in the pre and post administration

<table>
<thead>
<tr>
<th>Group</th>
<th>No.</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>DF</th>
<th>α Sig</th>
<th>η2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>33</td>
<td>59.61</td>
<td>3.75</td>
<td>37.625</td>
<td>32</td>
<td>0.01</td>
<td>0.978</td>
</tr>
<tr>
<td>Post</td>
<td>33</td>
<td>25.88</td>
<td>3.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to table (12), a statistically significant difference (α ≤ 0.01) between the mean scores of the study participants of the experimental group in the overall mind wandering, on the pre-post administration of the mind wandering scale in favour of the pre-assessment. Thus the fourth hypothesis was verified. In addition, the effect size (η²) of the experimental treatment on the overall mind wandering was (0.978) that was high and appropriate value. This indicates that a large proportion of the difference is due to the experimental treatment. Thus, there is a highly significant effect of the experimental treatment on the reducing of mind wandering and its items. Figure (9) shows these differences in a visual form.
Testing Hypothesis (5)

-The fifth hypothesis states that “There is a statistically significant negative correlational relationship between experimental group students’ scores in the post-assessment of the EFL reading comprehension skills of literary texts and their scores in the mind wandering scale.

For testing this hypothesis, the Pearson correlation was used to compare the scores of the experimental group scores in the post-assessment of the EFL reading comprehension skills test and the mind wandering scale. This means, the higher the scores of the group in the EFL reading comprehension test, the lower their scores in the mind wandering scale, and this indicates the acceptance of the fifth hypothesis of the research. Table (13) presents this correlation.

**Table (13):”the correlation between the scores of the experimental group in the post-test of the EFL reading comprehension skills and post-test of the mind wandering scale.”**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pearson Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading comprehension skills of literary texts</td>
<td>-0.912</td>
<td>-</td>
</tr>
<tr>
<td>Mind wandering</td>
<td></td>
<td>0.01</td>
</tr>
</tbody>
</table>

According to table (13), there is a statistically significant negative correlation at ($\alpha \leq 0.01$) between the scores of the experimental group in the post-assessment of the EFL reading comprehension skills of literary texts test and their scores of the mind wandering scale. This means that as participants have a high score in reading comprehension test, they will have a low level of mind wandering. Therefore, the fifth hypothesis was verified and accepted.

7- Discussion and Interpretation of the Study Findings:

This part presents a comprehensive explanation and discussion of the former stated findings attempted in the earlier part of the research. The findings are inferred and deliberated in the light of the study hypotheses.

Regarding the first and second hypotheses of the research, the findings revealed that there was statistically significant difference
between the mean scores of the experimental and control groups on the overall EFL reading comprehension skills of literary texts and sub-skills on the post administration of EFL reading comprehension skills test in favor of the experimental group. T-value was 11.305 which is significant at 0.01. This means that the experimental group attained more enhancement than the control one in their EFL reading comprehension skills of literary texts and its sub-skills. Also, in the pre- post administration of overall EFL reading comprehension skills and sub-skills for the experimental group, the accomplices showed a major progress for the post- administration. These results confirmed the first and second hypotheses statistically. Such result is consistent with the studies of (Wittrock and Merlin (1991); Sarani, & Jabbari, (2010) ; Kassem (2022)

Within the implementation of Generative learning materials, the participants summarize and paraphrase the content orally and in written form through using flow charts, diagrams and mind maps. The participants discussed their answers with each other and with the researcher. They discussed answers to questions individually, in pairs and in small groups according to the tasks of each session of the program. They discussed with their instructor difficulties in reading comprehension skills of literary texts. Participants initially concentrated on choosing specific content from what they had read or watched. The information is then organized in their working memory. This can entail changing it into a different kind or organizing the information so that it aids in problem- or question-solving. Through the sessions, they integrate the new information into their pre-existing schema, allowing their pre-existing knowledge to guide their thoughts about the new information and ensure that the new information can integrate into or modify their pre-existing knowledge so that the new knowledge can be adapted.

The researcher asserted that students in the experimental group had a high motivation to study English literary texts (shorts stories) by using the Generative learning model in several ELT classroom activities. Precisely, the generative learning phases through the sessions of the program enabled the participants the chance to actively answer to the tasks of the instructor. Moreover, the summarization method was used as one of the generative learning model strategies requires students to pick the main ideas within the literary texts, organizing these ideas into a
logical pattern, and incorporating new knowledge with pre-existing knowledge.

The development of EFL reading comprehension skills of literary texts may be due to the usage of mapping strategy as one of the strategies employed in the generative learning model. This strategy includes a variety of techniques, such as graphic organizers, knowledge maps and concept maps. It is a generative strategy because the students pick important words that indicate the main ideas, organize these ideas by establishing links with pre-existing knowledge by specifying the overall pattern of the map through literary texts materials. This was consistent with the previous studies such as (Mayer and Fiorella,(2016); Kassem,(2022)

Concerning the third and fourth hypotheses of the research, the findings showed that there was a statistically significant difference between the control group and the experimental groups mean scores in the post-assessment of EFL overall mind wandering in favor of the control group as T-value was 40.389 which is significant at 0.01. This means that the experimental group students reduced their mind wandering. Also, in the pre- post administration of the mind wandering scale for the experimental group, showed a significant progress for the pre- administration. These results confirmed the third and fourth hypotheses statistically.

Task-related cognition is an example of "externally directed cognition" during program sessions, which is characterized by the attention focused on (parts of) the surrounding environment. While "internally directed cognition" focuses attention on processes that are traditionally thought of as being "internal" to human cognitive systems and separate from the immediate world. This was consistent with the study of (Smallwood et al., 2007)

Thus, it can be asserted that the Generative Learning –Based Program was effective in developing English majors EFL Reading Comprehension skills of Literary Texts and reducing the Mind Wandering.

8- Conclusion

The results of the study asserted that the participants' EFL reading comprehension skills were developed and their mind wandering was reduced through the implementation of the generative learning -based program. Furthermore, the materials, tasks and activities used in the
sessions of the program aided to generate a concerted atmosphere which contributed significantly in developing EFL reading comprehension. Based on the results gained from this study, a positive effect of certain tasks such summarizing, mapping, visualization were used on the development of EFL learners’ reading comprehension.

Therefore, results of the present study assumed the effectiveness of the Generative learning model-based program in developing English majors’ reading comprehension skills and reducing mind wandering.

9- Recommendations of the study:

Based on the previous results, the following recommendations can be proposed:

1- EFL teachers should be trained on applying the generative learning model in classes.
2- Investigating the effect of using the generative learning model-based program in TEFL.
3- Curriculum designers must take into their account the significance of embedding the generative learning model implications in the syllables of diverse stages.
4- EFL university instructors should encourage their students to use the generative learning model in their teaching.

10- Suggestions for further Research:

Within the limitations of the current study as well as the findings being accomplished, the following research areas are suggested for additional survey:

➢ Repetition of the study variables with prospective teachers at the Faculty of Education.
➢ Repetition of the study variables with the higher studies students at the Faculty of Education.
➢ Using the generative learning-based program to develop prospective teachers' creative writing
➢ Accompanying further studies on the effects of generative learning to enhance EFL student teachers’ critical thinking
➢ Developing other language skills among EFL student teachers such as listening through employing the generative learning-based program.
➢ Investigating EFL students’ attitudes towards using the generative learning Moodle
➢ Examining the effect of using the generative learning strategies on EFL prospective teachers’ oral proficiency.
References


Al-Zahrani, A., (2018). The effectiveness of teaching a unit in mathematics based on the generative learning model in the development of achievement among students of the second intermediate grade, Journal of the Faculty of Education - Faculty of Education at Assiut University, Issue 34 (9), Volume 162-185


