

## Using Sheltered Instruction to Improve EFL Secondary Stage Students' Reading Skills

by

Moemen Sayed Ahmad Helaal

Advisors

Prof. Hayat Refaey Ali

Prof. Gamal Mohamed

Shehata

### ABSTRACT

This research aimed at investigating the effect of using sheltered instruction for improving EFL secondary stage students' reading skills. Sixty first-year students from Toukh Alkhail Secondary School, Minia Educational Administration, Minia Governorate were randomly selected as participants of the research. The experiment was implemented in the second semester of the academic year 2022–2023. The research adopted the quasi-experimental design as the sixty participants were divided into two groups, each of thirty participants. The experimental group was taught using sheltered instruction strategies while the control group was taught following the regular instruction. The instrument of the research was a reading skills test (pre and post), Analysis of the results revealed that the experimental group participants achieved a significantly higher level in their EFL reading skills than those of the control group. In the light of these results, it was concluded that sheltered instruction was effective to improve the EFL secondary stage students' reading skills.

**Key words:** sheltered instruction - reading skills - EFL Secondary stage students.

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استخدام التدريس المحمي لتحسين مهارات القراءة في اللغة الانجليزية لدى طلاب المرحلة الثانوية

إعداد

مؤمن سيد أحمد هلال

إشراف

أ.د./ جمال محمد شحاتة

أ.د./ حياة رفاعي علي

### مستخلص البحث

يهدف هذا البحث إلى معرفة أثر استخدام التدريس المحمي في تحسين مهارات القراءة لدى طلاب المرحلة الثانوية في اللغة الإنجليزية كلغة أجنبية. تم اختيار ستين طالباً من طلاب السنة الأولى من مدرسة طوخ الخيل الثانوية بإدارة المنيا التعليمية بمحافظة المنيا بشكل عشوائي كمشاركين في البحث. تم تنفيذ التجربة في الفصل الدراسي الثاني من العام الدراسي ٢٠٢٢/٢٠٢٣. واعتمد البحث التصميم شبه التجريبي حيث تم تقسيم المشاركين الستين إلى مجموعتين كل مجموعة تضم ثلاثين مشاركاً. تم تدريس المجموعة التجريبية باستخدام استراتيجيات التدريس المحمي بينما تم تدريس المجموعة الضابطة باستخدام الطريقة المعتادة. وكانت أداة البحث عبارة عن اختبار مهارات القراءة (قبلي - بعدي)، وأظهر تحليل النتائج أن المشاركين في المجموعة التجريبية حققوا مستوى أعلى بكثير في مهارات القراءة في اللغة الإنجليزية كلغة أجنبية مقارنة بالمشاركين في المجموعة الضابطة. وفي ضوء هذه النتائج، تم التوصل إلى أن التدريس المحمي كان فعالاً بشكل واضح في تحسين مهارات القراءة لدى طلاب المرحلة الثانوية في اللغة الإنجليزية كلغة أجنبية.

**الكلمات المفتاحية:** التدريس المحمي - مهارات القراءة - اللغة الإنجليزية كلغة أجنبية لطلبة المرحلة الثانوية.

## Introduction

Language plays a vital role in our daily life. People use language to communicate with others about what they want, think, feel, and believe. Language is not only a way of exchanging information, but also a way of preserving and transmitting knowledge, culture, customs, and traditions across generations. Reading is a key factor for achievement in school and in life. The skill of reading gives the chance for personal growth and career success.

Santoso and Sujoko (2014) also stated that reading is very useful in the foreign language context. Reading activity is the basis of acquiring new knowledge and skills (Chen et al., 2011). The National Reading Panel Report (National Institute of Child Health and Human Development [NICHD], (2000) summarized several decades of scientific studies that clearly demonstrate effective reading instruction covers five important areas: phonemic awareness, phonics, fluency, vocabulary, and comprehension.

Teachers can use many strategies to help students succeed in academic language. English language learners can enhance their academic language if they read regularly. One approach that helps students develop both academic content and English language is the sheltered instruction (SI). Sheltered instruction uses language that matches the grade level and concentrates on the content (Kareva and Echevarria, 2013). Sheltered instruction is a term used to describe content area instruction for limited English proficiency students.

Elghotmy (2018) stated that SI strategies were developed as a tool to help English Language Learners (ELLs) in the classroom setting by using specific instructional techniques. Teachers also identified two kinds of instructional objectives: content and language. Content objectives, usually based on state content standards, state the cognitive skills or knowledge that students are expected to learn during a lesson. Language objectives explain for learners the academic language functions and skills (Echevarria et al., 2012). Sheltered instruction has been mainly applied to language arts, which consist of two areas: reading and writing. Reading was taught in two ways. Reading: learning to read (e.g., letter recognition) and reading to learn (e.g., comprehension) (Markos and Himmel, 2016).

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Hence, some researchers have mentioned strategies that have been applied with sheltered instruction. They include Anticipation Guide, Characterization Chart, Concept Attainment, Feature Analysis, Find Someone Who, Foldables, Frayer Model, Free-Form Mapping, Sketch to Stretch, Storyboard, Two-Column Notes/T-Chart, Window Panning, and Words Across Contexts (Markos and Himmel, 2016, Zito-Nash, 2017; and Elghotmy, 2018).

### **Literature Review and Related Studies**

Some studies explored the effectiveness of using sheltered instruction to improve students' reading comprehension skills. The purpose of Ebedy's study (2019) was using Sheltered Instruction Observation Protocol (SIOP) to enhance reading comprehension abilities among second-year English majors at the Faculty of Foreign Languages and Translation, Misr University for Science and Technology. A pre-post reading comprehension test was devised and validated by a group of English as a Foreign Language (EFL) experts. The 68 participants were divided equally into two groups. The students in the experimental group were instructed to use the SIOP model, while the control group received regular reading comprehension instruction. The results of the study demonstrated that the students in the experimental group performed better in reading comprehension compared to those in the control group.

Elghotmy (2018) conducted a study which examined the effect of employing sheltered instruction strategies on the enhancement of reading comprehension skills for secondary stage students studying English as a foreign language (EFL). Seventy first year EFL students at the secondary stage were randomly split into experimental and control groups. The experimental group received instruction using sheltered instruction strategies, while the control group underwent regular reading instruction. The results of the study revealed that the EFL first-year secondary stage students in the experimental group displayed higher proficiency in their reading comprehension skills compared to those in the control group.

Alhariree (2013) examined how effective the Sheltered Instruction Observation Protocol (SIOP) was in improving the reading and writing abilities of EFL preparatory stage students at an experimental language school. The experimental group received English instruction using the SIOP model for critical reading and writing, while the control group followed a regular critical reading and writing curriculum. The findings indicated that

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SIOP was successful in enhancing the reading and writing skills of the students.

The findings of these studies showed that EFL students who learned content through sheltered instruction strategies did better than those who learned it through traditional methods in their EFL reading skills. Therefore, the researcher used sheltered instruction to improve EFL secondary stage students' reading skills.

### **Context of the Problem**

Many EFL learners usually do not have the opportunity to use English outside classrooms; reading is neglected in test preparation. English teaching focuses more on teaching language rules than using them. The researcher applied a diagnostic reading skills test for first-year students at Toukh Alkhail Secondary School in Minia Governorate. The results of the diagnostic test indicated the poor level of students' reading skills as 74% of the participants could not achieve 50% or more on the test. The mean score was (7.68 Marks) out of (20 Marks).

### **Aim**

The current research attempted to identify the effect of using sheltered instruction strategies to improve secondary stage students' EFL reading skills.

### **Hypothesis**

Based on both context of the problem and the previous reviewing of literature, the current research tried to verify the following hypothesis:

- There would be a statistically significant difference between the mean scores of the experimental group and those of the control group on the EFL reading skills posttest in favor of the experimental group.

### **Significance**

1. Increasing Egyptian EFL instructors' knowledge of the advantages learners would obtain through being exposed to sheltered instruction.
2. Inspiring Egyptian EFL students to participate actively in their language learning by enhancing learning in classroom and out of classroom setting.
3. Supporting EFL decision makers to apply sheltered instruction strategies in teaching English language.

### **Delimitations**

This research was delimited to the following:

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1. Reading skills needed for first-year secondary stage students included only the five aspects of reading: phonemic awareness, phonics, fluency, vocabulary, comprehension, and high-order thinking.
2. Sheltered instruction strategies needed for improving first-year secondary stage students' reading and writing skills included Anticipation Guide, Characterization Chart, Concept Attainment, Feature Analysis, Foldables, Sketch to Stretch, Window Panning, and Words Across Contexts.

### Definitions of Terms

Sheltered instruction (SI) is a method of teaching content in strategic ways that make the subject matter clear while enhancing students' English language development (Short et al., 2010).

Elghotmy (2018) described SI strategies as content-area instruction, delivered in a way that enables EFL learners to understand the content while improving their English language skills.

Sheltered instruction strategies can be **operationally** defined in the current research as content-area instruction, delivered in a way that helps EFL learners to understand the content while advancing their English language reading skills.

### Research Design

To achieve the aim of the present research, the researcher used the quasi-experimental design, where two EFL first year secondary school students' intact classes participated in the research. They were randomly assigned to experimental and control groups. The experimental group was instructed through sheltered instruction strategies to improve reading skills, while the control group received regular instruction. Pre-posttest in reading skills was administered to both groups before and after treatment.

### Participants

The participants of the research were a stratified random sample. They comprised 60 students. They were two intact classes selected from first year secondary school students at Toukh Alkhail Secondary School, Minia Educational Administration, Minia Governorate, during the second semester of the academic year 2022-2023. The two groups were assigned to an experimental group, (N=30) thirty students, and a control group (N=30) thirty students.

### The Pre-post Reading Skills Test

The test of reading skills was prepared by the researcher according to reading subskills: phonemic awareness, phonics, vocabulary, fluency, comprehension, and higher order thinking skills. It included 32 items, 14

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matching items, 12 multiple-choice items, 5 completion items, and only one read aloud item. It lasted 60 minutes and the total score of the test was 40 marks. The jury members confirmed the suitability and applicability of the test after making the suggested modifications.

After piloting, the internal consistency was calculated by finding the correlation coefficient between each test item and the total scores of the test. The results are as shown above in table (1).

**Table 1**

*Internal Consistency (Validity) of Reading Skills Test (N = 30).*

<i>Item</i>	<i>Corrected item-total correlation</i>	<i>Item</i>	<i>Corrected item-total correlation</i>	<i>Item</i>	<i>Corrected item-total correlation</i>
1	0.63**	12	0.87**	23	0.89**
2	0.83**	13	0.84**	24	0.74**
3	0.82**	14	0.789**	25	0.78**
4	0.72**	15	0.84**	26	0.85**
5	0.82**	16	0.83**	27	0.81**
6	0.71**	17	0.76**	28	0.78**
7	0.68**	18	0.64**	29	0.63**
8	0.81**	19	0.61**	30	0.74**
9	0.90**	20	0.76**	31	0.75**
10	0.86**	21	0.86**	32	0.59**
11	0.87**	22	0.76**		

Note: \*\* The correlation is significant at the 0.01 level.

To calculate the value of the reliability factor, the calculation of the value of the coefficient of Cronbach Alpha was calculated. The value of the Cronbach's Alpha coefficient was 0.98, which indicated that the test was highly reliable.

**Material: Adapted content based on sheltered instruction**

The adapted content consists of four parts: content analysis that helped the researcher to choose appropriate strategies and activities, framework, instructor’s manual, and students' activity book. It includes six units; each unit includes two lessons. Each unit begins with general objectives and each lesson includes its behavioral objectives. It also includes a model of strategies. Each lesson has activities related to reading skills. Each lesson ends with different questions to assess the students’ progress.

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### Procedures

**Step one (Warm-up):** Students were asked to predict and answer some questions about the topic through Anticipation Guide activity.

**Step two (presentation):** Students read the text, underlined unfamiliar words, and tried to guess their meanings. The instructor presented the topic of reading in an organized Concept Attainment Sample, Free Form Mapping, or Feature Analysis.

**Step three (Practice):** This phase depended on the information processing through applying some tasks in forms of activities such as: Sketch to Stretch, Foldable, Window Panning, Characterization Chart, and Two Column Notes.

**Step four (Evaluation):** The instructor assesses students' progress through reading a passage then answering the questions as an evaluation.

### Duration of the Experiment

The experiment was carried out during the second term of the school year 2022-2023. It lasted for 10 weeks and took 32.25 hours including testing time and piloting.

### Results

The research hypothesis predicted that there was a statistically significant difference between the mean scores obtained by participants of the experimental and control groups on the post administration of reading skills test (favoring the experimental group). Analysis of the collected data showed that the experimental group achieved a higher degree of improvement than the control group on the reading skills as shown in table (17) through calculating the total mean (35.16\*\*) for the experimental group and (23.03\*\*) for the control group (see table 2)

**Table 2**

*Comparing the performance of groups on the EFL Reading skills post-test*

<i>Group</i>	<i>Skills</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>t-value</i>	<i>DF</i>	<i>Sig.</i>	<i>Effect Size</i>
<i>Experimental</i>	<i>Phonemic Awareness</i>	<i>30</i>	<i>3.50</i>	<i>0.63</i>	<i>3.92</i>	<i>58</i>	<i>0.000</i>	<i>0.21</i>
<i>Control</i>		<i>30</i>	<i>2.73</i>	<i>0.87</i>				
<i>Experimental</i>	<i>Phonics</i>	<i>30</i>	<i>4.63</i>	<i>0.49</i>	<i>9.66</i>	<i>58</i>	<i>0.000</i>	<i>0.62</i>
<i>Control</i>		<i>30</i>	<i>2.50</i>	<i>1.11</i>				
<i>Experimental</i>	<i>Vocabulary</i>	<i>30</i>	<i>7.50</i>	<i>0.78</i>	<i>10.72</i>	<i>58</i>	<i>0.000</i>	<i>0.66</i>
<i>Control</i>		<i>30</i>	<i>5.36</i>	<i>0.76</i>				
<i>Experimental</i>	<i>Fluency</i>	<i>30</i>	<i>6.36</i>	<i>0.49</i>	<i>9.99</i>	<i>58</i>	<i>0.000</i>	<i>0.63</i>
<i>Control</i>		<i>30</i>	<i>4.76</i>	<i>0.73</i>				



<i>Experimental</i>	<i>Comprehension</i>	30	7.73	0.52	19.64	58	0.000	0.87
<i>Control</i>		30	4.40	0.77				
<i>Experimental</i>	<i>Higher-order Thinking</i>	30	5.43	0.63	11.44	58	0.000	0.69
<i>Control</i>		30	3.26	0.83				
<i>Experimental</i>	<i>Overall score</i>	30	35.16	1.49	25.11	58	0.000	0.92
<i>Control</i>		30	23.03	2.19				

Table (2) reports that the calculated *t*-values were (3.92, 9.66, 10.72, 9.99, 19.64, 11.44, and 25.11 respectively) and that all of them were statistically significant at the 0.01 level. This means that there were significant differences between the experimental and the control groups (favoring the experimental group) in the post-administration of the EFL reading skills test. Therefore, the first hypothesis of the research was verified and accepted.

As a complementary procedure to ensure the effect of sheltered instruction strategies on EFL secondary stage students' reading skills, the effect size was calculated using the Eta Squared formula ( $\eta^2$ ). The ( $\eta^2$ ) values of reading sub-skills were (0.21, 0.62, 0.66, 0.63, 0.87, and 0.69 respectively), whereas the ( $\eta^2$ ) value of overall reading was (0.92), which is considered highly effective and reflects a high variance.

## Discussion

Results showed that the sheltered instruction strategies improved the experimental group participants' reading skills. Such results go in line with the findings of Ebedy (2019), Elghotmy (2018), and Alhariree (2013), which concluded that using sheltered instruction strategies enhanced students' reading skills. This gave evidence that the use of sheltered instruction strategies proved effective in improving reading skills.

Consequently, the results revealed that using sheltered instruction strategies is more effective than regular methods for enhancing reading skills. Consequently, the effectiveness of sheltered instruction strategies could be attributed to the following reasons: The first was engaging students in collaborative work to achieve a common goal. The second was offering help to weak students by their groupmates. The third was providing first-year secondary students with meaningful activities. The fourth was using interactive teaching aids that encourage students to interact and learn positively. In addition, independent practice through some sheltered instruction strategies such as Find Someone Who, Foldables, and Feature Analysis, increased student's self-confidence, and enriched reading skills.

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Sheltered instruction strategies such as the **Anticipation Guide Strategy**, which built curiosity about a new topic before learning about it, and then checks for understanding after reading. **Characterization Charts** and **Feature Analysis** strategies were especially beneficial for improving students' comprehension, vocabulary, and content retention in several ways. **Foldables** and **Sketch to Stretch** were a kind of cooperative learning that encouraged first-year secondary students to present their ideas and complete their task in a funny way. All these strategies contributed to improving participants' reading skills.

### **Pedagogical Implications**

This research attempted to add knowledge needed to promote social change by improving reading skills. Considering the current research findings, the following pedagogical implications are cited.

1. Sheltered instruction strategies helped students to engage and interact because Characterization chart or Foldables - for example - helped them to infer the meaning of new vocabulary, comprehend the text appropriately, and interact positively.
2. Sheltered instruction strategies helped learners with lack of reading skills to achieve noticeable improvement through breaking down complex texts into manageable chunks, pre-teaching vocabulary to activate prior knowledge before reading, and using graphic organizers to help students organize information during reading.
3. The most sheltered instruction strategies use visuals (charts, diagrams, images, and graphic organizers) to enhance reading skills.
4. Learning through sheltered instruction strategies helps students exchange ideas, make decisions, and organize the roles inside the group.

### **Recommendations**

In accordance with the results and conclusions of the current research, the following recommendations were presented:

1. Teachers are recommended to be aware of the importance of sheltered instruction strategies in improving students' EFL reading skills.
  2. Teachers' roles should be changed from being the only source of information to being a facilitator, guide, monitor and a consultant.
  3. Reading aloud and pausing to discuss predictions and questions related to the text are effective reading strategies.
  4. Teachers are suggested to attend training courses that qualify them to use sheltered instruction strategies in teaching reading.
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5. Course designers are advised to include new methods in teaching English depending on using sheltered instruction strategies.

### **Suggestions for Further Research**

In the light of the results of the present research, Further research may be taken into consideration as follows:

1. The present research could be implemented using Artificial Intelligence (AI) applications for enhancing English language skills.
2. in-depth case studies of specific classrooms or schools implementing sheltered instruction should be conducted.
3. Conducting research to examine how sheltered instruction can be integrated into content-area classes (e.g., science, social studies, math).
4. The effectiveness of using sheltered instruction strategies in students with special needs or disabilities should be investigated.

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