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The Effectiveness of Visualization Mental strategy on EFL University Students' Story Reading Comprehension Skills

A B S T R A C T

Visualization mental strategy is a strategy used to develop EFL students' story reading comprehension skills especially their ability to construct mental images the current study aims to Finding out the effectiveness of the visualization mental strategy on EFL university students story reading comprehension skills. There are no statistically significant differences between the mean scores of the experimental groups in the reading comprehension skills at the recognition and the production levels at the post-test. Finding out the effectiveness of the visualization mental strategy on EFL university students' reading comprehension skills: main idea, inference & critical thinking, written expression and vocabulary in context. In order to achieve the aims of the study and verify its hypotheses, the sample of study consists of 60 students have been randomly selected from Tikrit University/ collage of education for humanities / department of English /second stage during the academic year 2025-2026. It is divided into two equal groups experimental and control groups. The two groups are equalized in their parents' attainment level, ages, their scores in previous year, and their achievement in the pretest. The researchers himself and the instructional material for a period of eight weeks have taught the two groups. The experimental group has been taught according to Visualization mental strategy, and the control group taught by using conventional method. An achievement test has been constructed validated, and applied to the two groups. The results showed that using Visualization mental strategy is more effective than using the conventional method for developing story reading comprehension skills.

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فاعلية استراتيجية التصور الذهني على مهارات فهم قراءة القصص لدى طلبة الجامعة دارسي اللغة
الإنجليزية لغة أجنبية

عقيل كامل طلال/طالب دراسات عليا

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الخلاصة:

تُعتبر استراتيجية التصور الذهني استراتيجية تهدف إلى تطوير مهارات فهم قراءة القصص لدى الطلبة

دارسي اللغة الإنجليزية لغة أجنبية، وخاصة قدرتهم على بناء الصور الذهنية. تسعى هذه الدراسة الحالية إلى الكشف عن فاعلية استراتيجية التصور الذهني في مهارات فهم قراءة القصص لدى طلاب الجامعة. لا توجد فروق ذات دلالة إحصائية بين متوسط درجات المجموعات التجريبية في مهارات فهم القراءة على مستوى التعرف والإنتاج في الاختبار النهائي. تهدف الدراسة إلى استكشاف فاعلية استراتيجية التصور الذهني في مهارات فهم قراءة الطلاب الجامعيين في: الفكرة الرئيسية، الاستنتاج والتفكير النقدي، التعبير الكتابي، والمفردات في السياق. لتحقيق أهداف الدراسة والتحقق من فرضياتها، تتكون عينة الدراسة من ٦٠ طالباً تم اختيارهم عشوائياً من جامعة تكريت / كلية التربية للعلوم الإنسانية / قسم اللغة الإنجليزية / المرحلة الثانية خلال العام الدراسي ٢٠٢٥-٢٠٢٦. تم تقسيم العينة إلى مجموعتين متساويتين: المجموعة التجريبية والمجموعة الضابطة. تم تحقيق التكافؤ بين المجموعتين في مستوى تحصيل والديهم، وأعمارهم، ودرجاتهم في العام السابق، وإنجازهم في الاختبار القبلي. قام الباحثون أنفسهم بتدريس المادتين التعليميتين للمجموعتين لمدة ثمانية أسابيع. تم تعليم المجموعة التجريبية وفقاً لاستراتيجية التصور الذهني، بينما تم تدريس المجموعة الضابطة باستخدام الطريقة التقليدية. تم إعداد اختبار تحصيلي تم التحقق منه، وتم تطبيقه على المجموعتين. أظهرت النتائج أن استخدام استراتيجية التصور الذهني أكثر فاعلية من استخدام الطريقة التقليدية في تطوير مهارات فهم قراءة القصص.

الكلمات المفتاحية: فاعلية، استراتيجية، التصور الذهني، طلاب اللغة الإنجليزية لغة أجنبية، مهارات فهم القراءة القصصية.

1.1 Statement of the Problem

Reading comprehension skill is essential for developing effective readers (Grabe & Stoller, 2002). Meaningful reading relies on strong cognitive foundations, including auditory analysis, memory, sound blending, segmentation, and visualization. McNeil (1992) explains that schemata—readers' prior concepts, beliefs, expectations, and experiences—help interpret and connect textual information. However, some readers fail to generate appropriate mental representations of texts despite linguistic adaptation indicating weaknesses in foundational cognitive strategies.

Comprehension is particularly challenging for EFL learners. Pan et al. (2003) note that understanding depends on prior, world, cultural, subject, and language knowledge. EFL students often struggle with unfamiliar vocabulary and structures differing from their native language.

Effective teaching strategies can address these weaknesses. One such strategy is visualization, mental strategy defined as constructing mental images while reading (Erfani, Iranmehr, & Davari, 2011, cited in Santi & Reflinda, 2022). Visualization allows readers to mentally represent events, stimulates imagination, and fosters deeper interaction with the text.

Despite its potential, limited empirical research has investigated the effect of visualization mental strategy on EFL university students' story reading comprehension. Therefore, the problem of the current study lies in the lack of effective instructional strategies to enhance story reading comprehension skills. This study aims to examine the effect of using visualization mental strategy on developing EFL university students' story reading comprehension skills.

1.2 The Aims of Study

The study aims at:

1. Finding out the effectiveness of the visualization mental strategy on EFL university students story reading comprehension.
2. Finding out whether there are any statistically significant differences between the mean scores of the experimental groups in the reading comprehension at the recognition and the production levels at the post-test.

1.3 Hypothesis of study

1. There are no statistically significant differences in the mean scores of the experimental group which is taught by using visualization mental strategy and that of the control group which is taught using conventional method.
2. There are no statistically significant differences between the mean scores of the experimental groups in the reading comprehension at the recognition and production levels at the post-test.

1.4 Limit of study

The study is limited to Iraqi EFL second year university students at Tikrit University/Collage of Education for Humanities/English Department during the academic year 2025- 2026. The model of the study paivio's Dual Coding Theory (1971).

1.5 Definition of Basic Terms

1.5.1 Effectiveness: The degree to which teaching strategies fulfil their intended learning objectives and provide noticeable increases in student achievement is known as effectiveness (Scheerens, 2016)

1.5.2 Visualization Mental strategy: According to sales et al. (2021) visualization strategy is often suggested as knowledge teaching strategy to help students while they learn. Students may be inspired to see and visualize situations or interactions through visualization.

1.5.3 Story reading: According to Abrams and Harpham (2015), a story is a narrative that uses a series of connected events arranged in a coherent way to convey an experience or concept.

1.5.4 Reading Comprehension skills: According to Weih (2018), reading comprehension skills are the capacity to create meanings during the pre-reading, while-reading, and post-reading phases of reading. It is one of the academic abilities that pupils are supposed to know at the elementary school level.

Theoretical Background

2.1 Model of study

Allan Paivio is a Canadian psychologist who proposed Dual coding theory in 1971. This theory explains human behavior and experience in terms of dynamic associative processes that operate on a rich network of modality-specific verbal and nonverbal or imagery representations.

According to Paivio (1971) the human cognitive system uses two distinct but interconnected information processing channels: a verbal system for linguistic information and a nonverbal or visual system for imagery and sensory information. Clark & Paivio (1991) When learners encounter material that engages both systems simultaneously, the information can be encoded into two mental representations, which increases the probability of retention and recall compared to verbal or visual input alone (Paivio, 1971). This theory has been described as one of the most influential cognitive frameworks in educational psychology and reading because it provides a clear mechanism for how mental imagery supports comprehension and memory (Sadoski & Paivio 2013).

2-2 Concept of Visualisation Mental strategy

Visualization is the ability to create mental images from written or spoken language. According to McNamara (2007), mental images help readers move beyond the text by connecting textual concepts with prior knowledge. The term derives from the Latin *visualize*, meaning sight. Visualization evolved from simply

“seeing” to forming mental images and making abstract phenomena perceptible, expanding into education, psychology, and data presentation.

Visualization refers to any mental image created in the absence of real objects or events, involving the five senses, sensations, and feelings. In psychology and education, it is defined as forming internal mental representations of objects not physically present (Hibbing & Rankin-Erickson, 2003). Key components include stimuli (visual, textual, or auditory input), mental image construction (transforming ideas or words into coherent images), linking to prior knowledge, and elaboration to enrich images and foster critical thinking (Addinna et al., 2019;

Visualization, also known as mental or visual imagery, has developed through cognitive and educational research rather than being attributed to a single individual. Allan Paivio’s Dual Coding Theory (1990) highlights that information stored both verbally and nonverbally enhances memory and comprehension emphasized how readers use verbal protocols to construct mental images for understanding and interacting with text.

2.3 Procedures of Visualisation Mental Strategy

The main procedures of teaching reading comprehension through the use of visualization mental strategy divided into three categories (Bochard 2005)

1-Prior to reading,

- a) The teacher selects a passage for the students to read.
- b) The teacher informs the class that while they read the material, they will create mental images or a “movie”.

2. While reading

- a) Students can work alone, in pairs, or in triads while reading. Key words in the first section of the text—typically denoted by a subheading—are underlined or marked with a checkmark, and they are then used to create pictures.
- b) Students talk about their pictures with one another.
- c) For the class discussion, the teacher may ask some questions.

3- After reading

- a) The teacher leads a class discussion about the material, requesting clarification and inferred details where necessary.
- b) The teacher asks the class to point out passages in the text where they made mental images.

2.4 Techniques for Visualization Mental Strategy

Techniques are proposed by Goudvis and Harvey (2000) in Nelson (2005). These strategies include:

- (1) Visualizing with Wordless Pictures
- (2) Visualizing from a Vibrant Text.
- (3) Visualizing in Reading, showing rather than telling.
- (4) Developing Mental Images that transcend Visualization.

2.5 Guidelines for Using Visualization Mental Strategy

Students understand difficult concepts and imagine characters, settings, and actions by learning to visualize and create mental images. Since not all students are naturally creative, visualization should be explicitly taught to enhance

comprehension and retention (Reading Educator, 2005–2019; Wilson, 2014). The steps include:

1. Select books with rich sensory information and pre-teach challenging vocabulary.
2. Read the text aloud while students follow along.
3. Ask students to picture the details as they read.
4. Allow time to reflect and then sketch or draw the mental images.
5. Encourage students to describe what they saw, heard, smelled, and felt, focusing on words that evoke strong imagery.

2.6 Nature of reading comprehension

Reading comprehension is a complex activity that involves interaction between the readers and the text. This suggests that reading comprehension is an important factor in determining whether students effectively grasp the textual material (Ibtisam, 2019). It requires attention, memory, and comprehension skills, and involves the reader's prior knowledge, attitudes, and experiences to construct meaning from the text.

2.7 Reading Comprehension Models

Reading comprehension is a dynamic and interactive process rather than a passive skill (Johnson, 2008). Three main models explain how readers construct meaning:

1. Bottom-up process: Focuses on the text. Readers progress from letters to words, phrases, and finally the whole text. This text-driven approach emphasizes linguistic forms and word recognition to support fluent reading (Dorkchandra, 2010).

2. Top-down process: Emphasizes the reader's prior knowledge and experiences. Readers interpret the text using what they already know, making it suitable for skilled readers (Al-Ahmadi, 2010).

3. Interactive model: Combines bottom-up and top-down processes. It integrates orthographic, lexical, syntactic, and semantic knowledge to enhance comprehension. Readers use prior knowledge along with text information to construct meaning effectively (Donoghue, 2009).

2.8 Concept of short story

As students practice visualizing text, the skill becomes automatic, increasing engagement by allowing them to use imagination and create drawings of the story (Mutar, 2023). Using short stories is an effective method to improve reading comprehension, as it encourages students to share ideas, connect the text with prior knowledge, and participate in class discussions. Stories, as organized narratives or accounts of experiences, provide students with exposure to natural language and foster comprehension through shared experiences between the teller and the listener (Saskatchewan Education, 2003).

2.9 Essential Components of Short Story

According to Rico and Guth s (2003) short story can be divided into several components:

1.Main idea: It serves as the foundation of the narrative, and selecting it is the most crucial step in crafting a quality story that is appropriate for the students' age range.

2-Setting what location are we? Where does the narrative lead us? What kind of reality and universe do it produce for us? What impact do the location and time have on the overall plot.

3- Theme Does the narrative provoke thought? What questions does it pose and what concepts does it investigate? Does it represent a perspective on human nature that you could attempt to articulate?

2.10 Rrelationship between Visualization Mental Strategy and Reading Comprehension skill:

Reading comprehension is a dynamic cognitive process that requires active thought and engagement with the text (Sadoski, 2008). Visualization, or creating mental images while reading, links thought and emotion, enhancing understanding, retention, and enjoyment of the material (Gersten et al., 2001;). Mental models, shaped by prior knowledge, experiences, and assumptions, help readers interpret text, predict outcomes, and connect ideas (Jacobs, 2009). Teaching visualization strategies, including the use of drawings, imagery, and guided instruction, improves comprehension, recall, inference-making, and summarization skills, particularly for struggling or reluctant readers. Different types of visualization strategies in literature reading—enactment-visualization, description-visualization, and speech-visualization—enable students to mentally engage with the story, imagine characters and settings, and connect with the narrative meaningfully (Kuzmicová, 2014).

Methodology

3.1 Experimental Design

Experimental design is the proposal according to which the experimental group is selected. Cook (1967) add that the selection of a suitable experimental design for testing is one of the more useful decisions that

a researcher argues that the selection of an appropriate experimental design for testing the deduced consequences of the hypothesis is important for conducting a

study. The experimental treatments are controlled and their effect is measured in the present study Quasi-experimental control group pre-test post design.

3.2 Population and Sample of Study

The population is the complete set of people, things, or events with shared characteristics that the researcher intends to study (Jilcha Sileyew, 2020). It provides a broader understanding of the institutional or demographic context . The target population for this study includes EFL students in the English Department at Tikrit University/College of Education for Humanities (2025–2026), totalling 544 students, with 135 in the second stage. The current study's sample includes 60 second-stage students from the English Department, College of Education for Humanities, Tikrit University (2025–2026). They were randomly divided into experimental (30) and control (30) groups. Additionally, 20 students participated in a pilot study, making the total 80 participants.

3.3 Equivalence of the Two Groups

In order to equalize the two groups, it is necessary to control the following factors that could lead to differences in the students' performance: their age, the educational attainment of their parents, and their previous year degrees (Good et al., 1976). This study equalized students according to their age, fathers' educational attainment, mothers' educational attainment, and students' scores in the previous year

3.4 Instructional Material

The instructional material of the current study includes two short stories from "A Book of Short Stories, which includes "Cat in the rain " by Ernest Hemingway and "The Doll's house" .by Katherine Mansfield. The experiment is conducted during the first semester of the academic year 2025-2026. It started on the 5th of October,

2025, and lasted for eight weeks; both groups received instruction on the selected short stories. The lectures are arranged to be on Sunday and Tuesday for both groups.

3.5- Constructions of achievement posttest

According to Brown (2003), an achievement test is a summative assessment used at the end of a lesson, unit, or course to measure students' proficiency.

The test consists of five questions, each containing five items (20 marks per question; 4 marks per item). Scoring is as follows: 4 marks for a correct answer, 2 for a partially correct answer, and 0 for no response.

- Question 1: Deep visualization of “The Doll’s House” and “Cat in the Rain” to assess story reading comprehension.
- Question 2: Mental visualization of symbolic objects and their meanings.
- Question 3: Multiple-choice questions.
- Question 4: True/False statements.
- Question 5: Vocabulary in context (multiple choices).

3.6- Scoring Scheme of Post-test

According to Eilks and Byers (2015), test papers should follow a strict scoring system and clearly indicate marks for each section. Accordingly, the scoring scheme for story reading comprehension is based on four criteria: main idea, inference and critical thinking, vocabulary and context, and expression.

Question One measures students' performance at the production level. It consists of five items (20 marks total). Each correct answer receives 4 marks, a partially correct answer receives 2 marks, and no answer receives 0.

Question Two also measures the production level. It consists of five items (20 marks total) and follows the same scoring system: 4 marks for a correct answer, 2 for a partially correct answer, and 0 for no answer.

3.7- Content Validity

The degree to which a measurement faithfully captures the specific intended area of the content is known as content validity (Boehm, 2008). Content validity is established by comparing test items with instructional objective to determine whether the items match or measure the objective a measure must adequately sample the subjects and cognitive processes involved in the content universe under examination in order to achieve content validity. Content validity of the achievement posttest has been achieved by constructing the table of specification based on Bloom's Taxonomy of Cognitive Objectives which ensure content analysis.

3.8- Pilot Study

According to Good (1973), a pilot study is a preliminary investigation conducted to identify potential challenges and ensure the test's feasibility. On Sunday, November 23, 2025, the researcher administered the test to a sample of 20 students at the University of Tikrit to achieve the following:

1. Confirm the appropriateness of the test items.
2. Evaluate the clarity and ambiguity of instructions.
3. Determine the time required to complete the exam.

The researcher found out that:

1. The test items and questions are connected to the instructional content that is taught in accordance with visualization mental strategy

2. The post-test's instructions are clear and unambiguous.
3. It took between one and a half and two hours to complete the exam items. This indicates that the test takes an average of one hour to complete.

3.9- Reliability of Post-test

Reliability is the consistency with which an instrument measures its intended construct. In this study, internal consistency was applied to ensure the equivalence and interconnectedness of test items, as a reliable instrument must yield consistent answers across all items (Fosgerua & Karlstrom, 2010).

3.10- Discrimination power

Discrimination power measures the extent to which a test item distinguishes between high-achieving and low-achieving students (Alderson, 1995). A strong item is correctly answered by high-skilled students and incorrectly by low-skilled ones, with an ideal DP value approaching 1.0. In this study, the posttest items demonstrated good discrimination, ranging from 0.36 to 0.71.

3.11- Final administration of the post-test

After ensuring the reliability, validity and pilot administration the post-test has been applied on 30 of November 2025 for both control and experimental groups. The exam papers have been given to the participants, who must carefully read the instructions and clearly write their answers on them within the allotted test time. Following that, all test papers have been collected at the time limit to be scored according to the designed scheme.

Data Analysis and Results discussion:

4.1-Comparison between the Mean Scores of the Experimental Group and that of Control Group in the Post-test: The results showed a significant difference in favor of the experimental group ($M = 83.76$) over the control group ($M = 62.00$), $t(58) = 7.410$, $p < .05$, with a large effect size ($d \approx 1.91$). Thus, the first hypothesis was rejected.

Means, Standard Deviation, and t-Values of the Two Groups in the Posttest

Group s	No. of students	Mean	SD.	T-Value		Effect Size	DF	Level of Significanc e
EG.	30	83.76	10.11	Calculated	Tabulated	1.91	58	0.05
CG.	30	62.00	12.50	7.410	2.00			

4.2- Comparison between Experimental Groups: A paired-samples t-test showed a significant difference between recognition ($M = 47.10$) and production ($M = 36.66$) levels, $t(29) = 5.131$, $p < .05$, in favor of recognition. Therefore, the second hypothesis was rejected.

Students' Mean Scores, Standard Deviation, and T-Value of the Experimental Group

Performance at the Recognition and Production Levels

Group	No. of students	Mean	SD.	T-Value		DF	Level of Significanc e
Recognition	30	47.10	10.23	Calculated	Tabulated	29	0.05
Production	30	36.66	2.89	5.131	2.045		

4.4- Discussion of results

The findings showed that the experimental group significantly outperformed the control group ($M = 83.76$ vs. 62.00 ; $t = 7.410 > 2.00$; $d = 1.91$), confirming the strong effect of the visualization mental strategy and leading to the rejection of the first hypothesis.

The experimental group also performed better at the recognition level than the production level (47.10 vs. 36.66 ; $t = 5.131 > 2.045$), rejecting the second hypothesis.

A one-way ANOVA revealed significant differences among reading skills ($F = 11.013 > 2.68$), with highest performance in main idea and inference, and lowest in written expression. Thus, the third hypothesis was rejected.

Conclusion and Recommendation and Suggestions

5.1 Conclusions

According to the obtained results of the current study the Following points have been concluded

- 1- Visualization mental strategy has significant role in developing EFL students in story reading comprehension skills.
- 2- This study provides empirical evidence in favor of incorporating of visualization mental strategy into EFL story reading instruction at the University level.
- 3- Visualization mental strategy improves higher -order thinking involved in story reading comprehension including inference and critical thinking
- 4- Visualization mental strategy enables university students to have better story reading comprehension skills than those who use conventional method.

5- Students are better able to predict outcomes and make inference about their implications and use imagination.

6- This strategy helps students to link new information to prior knowledge.

5.2 Recommendations

In view of the results and conclusion drawn, the following suggestion are made

1- EFL teacher are encouraged to employ the visualization mental strategy to improve their students' competence in a range of linguistics skills.

2- The Ministry of Higher Education's curriculum designers are recommended to use visualization mental strategy as an English teaching strategy.

3- EFL teachers should take part in in-service training workshops that enable them to educate their students various language components and improve their performance by employing the visualization mental strategy.

5.3 Suggestions for further studies

For further work the following studies are suggested to investigate:

1- The effect of visualization mental strategy on EFL students' acquisition of vocabulary through context.

2- The role of visualization mental strategy in improving EFL reading using higher order thinking.

3- Investigating how visualization mental strategy affects EFL students' writing and speaking production skills

References

- Abrams, M. H., & Harpham, G. G. (2015). A glossary of literary terms (11th. ed.). Cengage Learning.
- Addinna, A., Ovilia, R., & Asfina, R. (2019). Students' visualization in reading and their cognitive learning styles. *Lingua Didaktika*, 13(1). <https://doi.org/10.24036/ld.v13i1.103965>
- Al-Ahmadi, M. S. (2010). Reading strategies of Saudi University students studying English as a foreign language University of Reading.
- Boehm, A. E. (2008). Content validity. In P. J. Lavrakas (Ed.), *Encyclopaedia of survey research methods*. SAGE Publications.
- Bouchard, M. (2005). Comprehension strategies for English language learners. Scholastic.
- Brown, H. D. (2003). *Language assessment: Principles and classroom practices*. Longman.
- Cook, T. D. (1967). *Experimental and quasi-experimental designs for research*. Rand McNally.
- Davies, A., Brown, A., Elder, C., Lumley, T., & McNamara, T. (1999). *Dictionary of language testing*. Cambridge University Press.
- Donoghue, M. (2009). *Language arts: Integrating skills for classroom teaching*. SAGE Publications.
- Dorkchandra, D. (2010). Enhancing English reading comprehension through a text structure reading strategy CALL program [Doctoral dissertation]. Suranaree University of Technology.
- Eilks, I., & Byers, B. (2015). *Relevant chemistry education: From theory to practice*. Sense Publishers.
- Erfani, S. M., Iranmehr, A., & Davari, H. (2011). Deepening ESP reading comprehension through visualization. *Journal of Language Teaching and Research*, 2(1), 270–273. <https://doi.org/10.4304/jltr.2.1.270-273>
- Fosgerua, M., & Karlstrom, P. (2010). *Language testing and assessment*. Routledge.

- Gersten, R., Fuchs, L. S., Williams, J. P., & Baker, S. (2001). Teaching reading comprehension strategies to students with learning disabilities: A review of research. *Review of Educational Research*, 71(2), 279–320.
- Good, C. V. (1973). *Dictionary of education* (3rd ed.). McGraw-Hill.
- Good, T. L., Biddle, B. J., & Brophy, J. E. (1976). *Teachers make a difference*. Holt, Rinehart and Winston.
- Goudvis, A., & Harvey, S. (2000). *Strategies that work: Teaching comprehension for understanding and engagement*. Stenhouse Publishers.
- Grabe, W., & Stoller, F. L. (2002). *Teaching and researching reading*. Pearson.
- Guth, H. P., & Rico, G. L. (2003). *Discovering literature: Stories, poems, plays* (3rd ed.). Prentice Hall.
- Ibtisam Jassim Mohammed (2019) *Journal of Tikrit University for Humanities* ISSN: 8181-8171 (Print) available online at: <http://www.jtuh.tu.edu.iq>
- Jilcha Sileyew, K. (2020). *Research design and methodology*. In Cyberspace. IntechOpen.
- Johnson, K. (2008). *An introduction to foreign language learning and teaching* (2nd ed.). Pearson Longman.
- Kuzmicová, A. (2014). Literary narrative and mental imagery: A view from embodied cognition. *Style*, 48(3), 275–293.
- Martínez-Mesa, J., González-Chica, D. A., Duquia, R. P., Bonamigo, R. R., & Bastos, J. L. (2016). Sampling: How to select participants in my research study? *Anais Brasileiros de Dermatologia*, 91(3), 326–333.
- McNamara, D. S. (Ed.). (2007). *Reading comprehension strategies: Theories, interventions, and technologies*. Lawrence Erlbaum Associates.
- McNeil, J. D. (1992). *Reading comprehension: New directions for classroom practice* (3rd ed.). HarperCollins.

- Mutar, H. H. (2023). Investigating the visualizing and integrating strategies of EFL university students in studying a short story. *Tikrit University Journal of Humanities*, 29(2), 45–58.
- Paivio, A. (1971). *Imagery and verbal processes*. Holt, Rinehart and Winston.
- Pan, E. T. (2003). *Teaching reading: A guide for teachers*. International Academy of Education.
- Reading Educator. (2005-2019). Visual imagery strategy.
<http://www.readingeducator.com/strategies/visual.htm>
- Sadoski, M. (2008). Stemming the tide: Retiring the redundancy of "reading fluency" and "reading comprehension" with a dual coding view. *Reading & Writing Quarterly*, 24(2), 212–22
- Salas, S., Williams, B. K., Mraz, M., & Adrane, S. (2021). Reading eyes wide shut: Visualization, language learners, and texts. *English Teaching Forum*, 59(1), 12–19.
- Sari, P. D. (2016). An analysis of students' reading comprehension based on the four levels comprehension skills. *Journal of Linguistics and Language Teaching*, 3(1), 1–20.
- Saskatchewan Education. (2003). *English language arts: A curriculum guide for the middle level*. College of Avenue.
- Scheerens, J. (2016). *Educational effectiveness and ineffectiveness: A critical review of the knowledge base*. Springer.
- Weih, T. G. (2018). *Teaching reading comprehension to students in grades 4-6*.