Exploring Reading Strategies in Comprehending Academic Novels Integrated with Visuals at O Level

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Abstract

The current study explores the reading strategies used by the students of O Levels while they read academic novels integrated with visual components. The main goal was to analyze how the multimodal texts affect the comprehension of the students and shape the methods and strategies they use while reading academic novels with integrated text. Quantitative descriptive methodology along with a structured questionnaire was employed to investigate how 250 students from diverse subgroups get engaged with the multimodal texts. The study was conducted in three segments: planning, collecting data and the analysis. The Multimodal Texts Reading Strategies Inventory (MTRSI) was utilized after evaluating its validity and reliability during the preparatory phase. To guarantee a wide representation of the viewpoints of students, Google Forms were used to gather the responses during the phase of data collection. To identify the most frequently used strategies for improving the comprehension of the multimodal texts, the responses of students were analyzed during the analytical phase. Important results show that when working with multimodal texts, students use a variety of global, problem-solving, support, and post-reading tactics. They use a variety of assistance systems to confirm their understanding, preview texts and images, and rely on visual aids to help them navigate difficult parts. This study advances the field of instructional techniques by illuminating the efficient use of multimodal components to enhance students' reading comprehension.

Keywords: multimodal texts, visual aids, multimodal literacy theory, reading strategies, the multimodal text reading strategies inventory (**MTRSI**)

1.Introduction

The incorporation of visual elements into academic texts has grown more common in modern education, indicating a move toward multimodal teaching methods. In literature studies, standard texts are sometimes supplemented with diagrams, photographs, and other visual aids to improve understanding and interpretation (Kress & van Leeuwen, 2006). This is a particularly noteworthy trend. These visual components give O Level students, who frequently struggle with difficult academic material, important support by adding context and encouraging a deeper comprehension of the subject matter.

Students face additional difficulties when visual components are added to academic texts. Sophisticated reading methods must be developed in order to traverse and interpret both textual and visual material (Serafini, 2014). This requirement draws attention to a substantial vacuum in the literature, especially with regard to the ways in which Pakistani students more especially, those enrolled in the O Level system interact with and understand multimodal texts.

By examining the reading techniques used by the students of O Levels in Sialkot, the city of Pakistan located in the province of Punjab. The city is known for both, its rich history being associated with Mughal and colonial eras and for its major industrial hub, specifically for the production of sports goods, surgical instruments and leather products. Labeled as the ''City of Exporters'', Sialkot significantly contributes to the economy of Pakistan.

Additionally, the city has a vibrant educational environment, having wide range of public and private institutions which offer quality education from primary to higher levels. Many institutions also offer O Levels and A Levels ultimately making it an ideal place to study English Literature among O Level students.

The study was conducted among the students of O Levels of different schools located in Sialkot, selected through stratified random sampling making sure the diverse background of the study. The educational system of the study emphasizes English Literature and integrated learning offering suitable context to study how students use reading strategies to comprehend academic novels including visuals.) to interact with academic texts that include visual components, this study intends to fill this gap. The interaction of the students with the multimodal texts will be closely examined using the Multimodal Texts Reading Strategies Inventory (MTRSI) as a framework.The study further aims to enhance the comprehension and knowledge of the multimodal literacy and its implications for both, teaching and learning by focusing on this specific cohort.

It is proposed that the findings of the study will provide teachers with valuable insights about how students interact with and comprehend the text integrated with visuals. The primary objective of the study is to enhance the reading proficiency and academic performance by adding to the larger conversation on multimodal literacy and how it may be used in various educational settings (Jewitt, 2008).

1.1.Background of the Study

Like many other places, the educational system of Sialkot is going through a major change, especially in the manner in which academic material is taught and used. O Level students are efficiently and effectively dealing with this change because they interact with texts that are getting more complicated and varied. A totally new insight has been given to the process of learning through the integration of visuals to the academic books. By offering visual signals that support the textual information, these visual elements—which include charts, pictures, diagrams, and other multimodal components—are intended to improve students' comprehension (Kress & van Leeuwen, 2006).

Reading methods are becoming more and more important in this changing educational environment because they help students understand and navigate these difficult texts. According to Pressley and Afflerbach (1995), reading strategies are purposeful, goal-oriented efforts to regulate and alter the reader's attempts to decipher text, comprehend words, and create meanings. Academic novels with visual components add another level of intricacy to the reading experience. Although these images are meant to help with comprehension, they also force students to modify their reading techniques in order to comprehend and combine data from many sources (Unsworth, 2001). This change calls for a new method of reading that goes beyond word decoding to include the interpretation of visuals and an awareness of how they relate to the content (Serafini, 2014).

It is crucial to comprehend how students interact with texts that have multiple modes of expression. The capacity to successfully traverse texts that incorporate many modalities of communication is a vital talent in an age where digital literacy is becoming more and more relevant (Leu, Kinzer, Coiro, & Cammack, 2004). In order to get the success in educational as well as the real world setting, it is crucial for the students of O Levels to develop these abilities which aid them in the early stages of their academic careers (Gee, 2004).In Sialkot where exists huge variation in educational resources as well as wide range of distinct instructional styles throughout institutions, it becomes even more significant to find out and comprehend the unique challenges faced by the students simultaneously finding the coping mechanism for the challenges they face. So, to analyze and investigate these elements in depth with a constant focus on the reading strategies which the students of O Levels employ while reading the text integrated with various modes of expression , is the main aim of the underlying study.

By taking into account how the students of O Levels in Sialkot interact with the text integrated with visuals, the current study contributes to the broader insight on multimodal literacy and its impacts on the education and comprehension of the students.

To put it briefly, the research problem is to determine how the students of O Levels in Sialkot engage with academic books that have visual components. This include figuring out the reading techniques people use, evaluating how well visual aids improve comprehension, and looking at the ramifications for instructional tactics in various educational situations (Jewitt, 2008; Kress & van Leeuwen, 2006). By addressing these problems, we can gain important insights into the opportunities and difficulties that multimodal texts bring and advance the creation of instructional procedures that are more successful.

1.3.Problem Statement

Though academic novels with visual components are increasingly being used in classrooms, little is known about how Sialkot O Level students interact with these multimodal books. It is yet unknown how well visual aids like charts, diagrams, and pictures help reading processes and improve comprehension. Studies that have already been done mainly concentrate on the Western contexts, which leaves a big knowledge vacuum on how students in other educational and cultural contexts engage with and gain from multimodal texts.

For students in Sialkot, the incorporation of images into academic texts offers both chances and difficulties. Although the purpose of these visual aids is to help students comprehend abstract ideas more easily by giving them tangible examples, there is little evidence to support their effects on students' reading skills or comprehension in general. It's possible that using standard reading techniques won't be enough to interact with books that blend spoken and visual information.

By examining the reading skills, students of O Levels in Sialkot use to connect with academic books that incorporate visual aspects; this study seeks to address this research gap. The study investigates how students apply these techniques to learn difficult subjects and evaluate whether or not visual aids improve or impede their comprehension. The results of this study shed light on the efficacy of texts that are multimodal and guide the development of instructional strategies that enhance students' learning in a variety of settings.

1.4.Research Objectives

The present work sets the following objectives to focus the endeavor:

i. To identify the strategies frequently used by the students of O Levels when they are engaged with the academic novels which include visual aids.

ii. To explore the impact of the reading strategies employed by the students of O Levels on their comprehension and retention of the information.

1.5.Research Questions

Taking into consideration the research objectives, following questions were set to investigate and achieve the aims of the underlying study:

i. What reading strategies are commonly used by the O levels students when they read academic novels full of visuals?

ii. How reading strategies employed by the students of O Levels while reading integrated text influence their comprehension and retention of the information?

The study not only provides insight into how students approach the multimodal texts but also explore which teaching strategies are consistent with successful comprehension of the students of this kind of text particularly taking into account the students of O Levels in Sialkot, thereby informing the instructors about the effective methods to enhance learning outcome (Unsworth, 2001).

Moreover, this study provides the broader extensions for the educational research and practice. For the countries like Pakistan which have not taken as a center of focus usually, the findings of the current study will extend the corpus of research for them on multimodal literacy. The examination of the ways in which visuals influence the comprehension and outlining the suitable and effective reading strategies for multimodal text among the students of O Levels in Sialkot makes this study significant,addressing these concerns, the study not

only enhances our insight of multimodal literacy but also aids to shape refined teaching approaches and provides thoughtful outlook to domestic as well as international environment of learning simultaneously.

2.Literature Review

By evaluating the theoretical groundwork and empirical findings of the previous studies, presenting the foundations for the purpose and approach of the current study, the literature review not only sheds light on the primary idea but also knowledge gaps in the topic. A multifaceted approach is applied in multimodal literacy as it analyzes literacy at different levels such as the ways in which text and visuals work altogether to influence the understanding of the students and the ways students utilize coping mechanisms to overcome the challenges in the academic settings.

It is stated by DeBruin-Parecki et al. (2015) that reading empowers students in a way that they become independent in comprehending complicated structures of text while making them proficient in academic and professional skills. Successful readers exhibit an exceptional level of comprehension as they have ability to create links between several ideas, understand complex notions and think critically about what they are reading simultaneously. Thus, instructors need to shape and imply educational strategies that encourage critical thinking and pre- reading to develop the skills of comprehension in readers. (Javed et al., 2015)

Slaouti et al. (2013) states that, reading comprehension guides readers to recognize and set specific goals during reading in order to motivate them so that they ready and explore more thus enhancing their knowledge of reading strategies and relevant experience. Three stages which exist in the comprehension process were cited by Ismail et al. (2015).
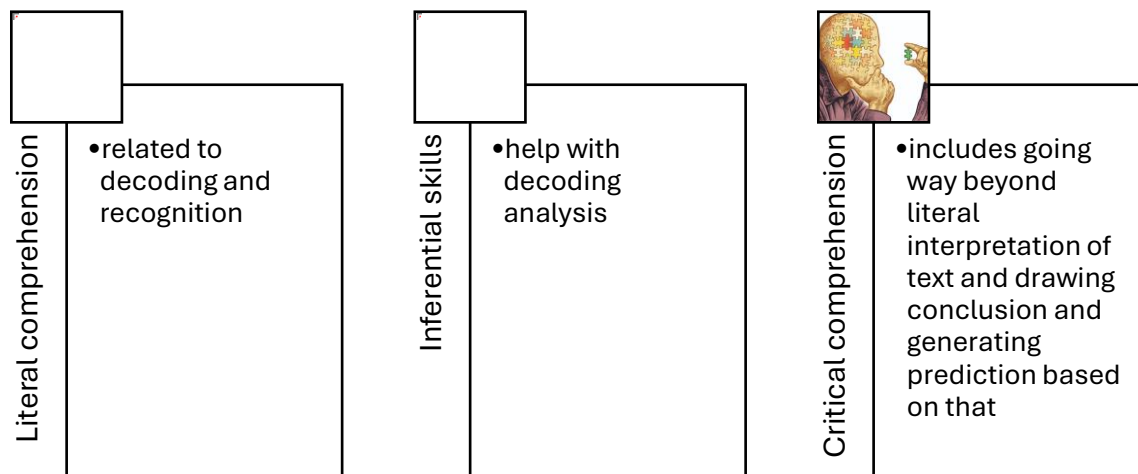
Fig. 2.1.

According to Follmer and Sperling (2018), readers who are adept at drawing conclusions from material are better able to understand it and keep track of their progress. They are also proficient at using reading tactics.

Moreover, McNamara and Kendeou (2011) summarized:

i.   First and foremost, early childhood educators need to develop comprehension skills.
ii.   Second, teaching should concentrate on procedures that enhance students' reading comprehension (i.e., product).
iii. Third, if the text is unclear, scaffolding is vital for generating conclusions.
iv.   Furthermore, comprehension is a collaborative process that relies on both the reader and the assigned reading assignment. The right resources must be chosen for this process in order to train certain individuals and organizations.

    v.   Finally, standardized reading comprehension tests aid teachers better recognise the strengths and limitations of their students.

Several studies (Ajideh et al., 2018; Magogwe, 2013; Tavakoli, 2014) have looked at readers' awareness of and usage of metacognitive techniques and have discovered different patterns of approach preferences. Cognitive reading tactics were the most popular, followed by support and metacognitive strategies. This result is consistent with the findings of Ajideh et al. (2018), who noted that students' preferred reading strategies in the context of ESP were cognitive strategies. Tavakoli (2014) notes that the results did, however, indicate a reasonable awareness and application of reading methods.Support strategies (SUP) was the reading strategy subclass that students favoured the most, while problem-solving subclass (PROB) was the least.

According to research by Sadoki, Goetz, and Avila (1995), tangible language material is simpler to understand and retain because it can be more easily visualized and linked to past information. This makes it easier to encode and retrieve into long-term memory. Furthermore, abstract statements took a lot longer to read than concrete words, and students were more inclined to make comprehension mistakes when reading abstract sentences, according to Juel and Hohnes (1981). Abstract phrases, such liberty, are remembered as distinct words, but concrete phrases, like yellow flower, are recalled as integrated imagery (Paivio's, Murphy, & Bons, 1994).

According to Long et al. (1989), picture instruction improves a reader's understanding of phrases, paragraphs, and passages. When it comes to aiding recollection for interpretation rather than literal recollection, imagery instruction is especially helpful. It has been suggested that vivid mental images are linked to higher reading comprehension and deeper degrees of meaning (Sadoski, 1983).

Additionally, using visual aids promotes movement of the body and may improve control. Jain (2004) the well-known Chinese saying "one sight is valuable, a hundred words" refers to the reality that knowledge is acquired by the mind. The proverb "if we listen, we forget that if we observe we remember that and if we do something we know it" also applies, which suggests that using visual aids in the teaching and learning process improves its efficacy. "Visual aids boosted thinking and cognize," as Kishore (2003) stated. There are several benefits to using visual aids in the teaching and learning process (Mohanty, 2001).

Although a lot of research has been done on multimodal literacy and reading methods, there aren't many studies that specifically look at how O Level students' understanding of multimodal texts is affected by particular problem-solving and support tactics. The majority of previous research either deals with multimodal literacy in general or concentrates on theoretical issues without exploring real-world implementations in academic contexts.In order to fill this gap, this study offers a thorough examination of the ways in which note-taking, post-reading reviews, and the use of visual aids for understanding affect O Level students' comprehension of academic novels. By focusing the real-world applications, the current study provides novel point of view on the effectiveness of these strategies and their practical results for the improved learning outcomes of the students.

3.Methodology

This study draws on the quantitative descriptive approach in order to investigate the techniques used by the students of O Levels while reading the text integrated with visuals. By evaluating the variables objectively and offering perfectly organized and vivid method examining the effect of several reading strategies on the understanding in the target demographic, this study is ideal for quantitative research. The descriptive nature of the research is significant as it aims to provide a comprehensive detail of the modern reading

techniques without altering any variable. Therefore, the current method is useful for figuring out how common and successful various tactics are in actual classroom environments.

Quantitative framework of the study made it possible to analyze the data collected through analytical methods. We need to employ all these tools in order to summarize the data, test the hypothesis and recognize the patterns.For example, the most commonly used strategies of reading and how these strategies are used to check the success and comprehension level of the students through the evaluation of frequencies, central tendencies and variations can be found out through this study.Moreover, using inferential statistics to apply the findings of the sample to the students of O Levels, the external credibility of the study can be enhanced.

3.1.Sampling

Stratified random sampling technique was being used carefully to select the suitable sample of the students of O Levels. In order yield a comprehensive and accurate sample which ensure the representation of the whole population, this technique was utilized. A thorough representation of the whole population from which the sample was chosen is the core purpose of selecting this technique. By classifying the diverse population into small strata and then randomly selecting individuals from each stratum, the representation of diversity found within the broad community of the students of O Levels was ensured.

The centre where the current study was conducted is Sialkot also considering its sub districts. Thi city is well known for its variety of educational institutions offering O Levels. A sample of total 250 students from different schools across the various sub districts of Sialkot including Daska, Sambrial, and Pasrur was targeted. Based on the accessibility, ease and willingness to participate in the study, the selection of different institutions was done. The utilization of stratified random sampling technique ensured the representation of each sub district as well as various educational contexts by classifying the students in different strata based on academic level, age and group. Thus, by presenting thorough details about the strategies employed by the students of O Levels to interact with integrated text, the representation of diverse educational contexts was ensured. For the detailed analysis of the ways which various groups percept and understand the academic text integrated with visual components as well to avoid the biasness in the sampling, the technique of stratified random sampling was utilized.

3.2. Data Collection Tools

To collect data for the current study, the Multimodal Text Reading Strategies Inventory (MTRSI), a specific tool to investigate the ways in which the students deal with multimodal texts including visual elements. This tool was well suited for the current study, because of its ability to examine the reading strategies employed by the students to read the academic novels integrated with visuals such as charts, diagrams and pictures. For the purpose of rating on MTRSI, the Likert scale with values varying from 1 (Never) to 5 (Always) is used. To ensure the relativity of questionnaire not only with the context of the study but also with the subject and complexity of the academic books, the MTRSI was slightly modified. Considering the convenience, inclusiveness and competence of Google forms to handle the enormous number of responses, it was selected as an online platform to distribute questionnaire. Selecting Google forms as an online platform not only proved to be the efficient choice in terms of disseminating questionnaire but it also increased the participation of students and by providing them ease to solve it anytime and anywhere it was convenient for them to do so. Ultimately, the increased participation rate provided us with representative sample.

The study was conducted at three different stages to ensure the detailed and systematic investigation of the reading strategies employed by the students of O Levels while dealing with the academic text integrated with visuals. The first phase of the study involves to setup the procedures and research tools. A pilot study was also conducted to ensure the credibility

and validity of the questionnaire before it was disseminated. Moreover, in the preparatory stage, it also underwent through an evaluation to ensure the representation of most relevant reading strategies by the MTRSI.

3.3. Data Collection Procedure

After the stage of preparation of the study comes the stage of collecting data. The developed questionnaire based on MTRSI was distributed among the participants via email. The time period of three weeks was given to the participants ensuring that they may get sufficient time to read and comprehend the question items and the submit their responses accordingly. Google Forms were utilized to collect and analyze the responses. The automated procedure of data collection to data analysis via Google Forms provided the most accurate and objective findings minimizing the risk of errors in manual data entry.

4. Data Analysis

A standardized questionnaire was used to gain the concise knowledge of the experiences of the students as well as their inclination towards the integrated texts. The analysis of the responses of the participants provides us with the in-depth insight of how the visual components integrated with text influence their choice of reading strategies and enhance their understanding. The in-depth knowledge of these strategies will help the teachers to craft their teaching approach and also in the selection of instructional tools to accomplish elevated educational objectives.

The questionnaire which was developed to seek this purpose is classified into four sections among them each section focuses on distinct elements of reading techniques:

4.1. Global Reading Strategies for Multimodal Texts

To explore and investigate the general and universal strategies which students employ when they interact with the multimodal literature for the very first time is set aim of this section.

4.2. Problem solving strategies for Multimodal Text

After exploring the general and universal strategies employed by the student in the previous section, the strategies students employ to deal with and overcome the challenges they face while reading multimodal texts, are explored in this section.

4.3. Support Strategies for Multimodal Text

The main aim of this section is to explore the type of support students need and benefit from while reading the text which integrated with various modes of expressions. Assistance of teacher, peer discussions and consulting additional material all are included in the outside resources students use to aid their understanding of the text integrated with visuals and this additional support has been the subject to be studied under this section.

4.4. Post- Reading Strategies with Multimodal Texts

The post strategies students employ after they are done reading the multimodal text are the subject of investigation of this section. Along with assembling the information of the students and taking into account the alignment of text with visuals, this section also included practices such as summarizing the primary notion

4.5. Section 1: Global Reading Strategies for Multimodal Texts

To delve into the techniques, students look for and employ globally while interacting with the multimodal texts containing visuals is the focus of this section. This section focuses to highlight the strategies students employ to enhance their engagement while dealing with the text integrated with visuals. For this, the current study will delve into:

4.5.1. Utilize Visual Cues: To better understand the multimodal text, how do students interpret and use visual aids including diagrams, charts or pictures?

4.5.2. Integrate Information: Which strategies are employed by the students to have a thorough insight of the main idea of the topic integrating the information both from text as well as visual components?
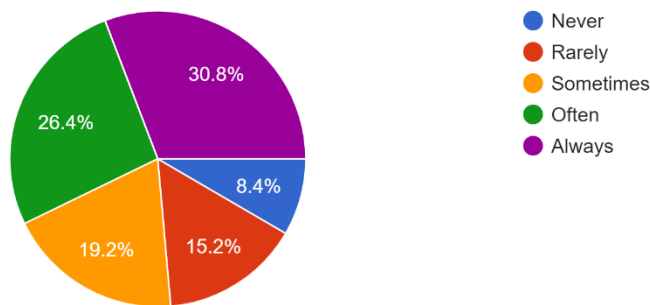
4.5.3.Adapt Reading Techniques: While dealing with the multimodal textsincorporating both written and visual components, how do students shape their strategies accordingly?

The analysis of the question items of this section is as under:

Question 1:

I preview both the text and the visuals before reading to get an overall idea of the content.
250 responses

The strong agreement of 30.8% with the statement highlights previewing as a significant reading strategy which students employ actively to navigate between the text and visual elements to develop the precise understanding of the general idea of the text. The efficacy of the students to employ this strategy for the better understanding of the complex academic content, this dynamic technique makes them the most proficient readers with planned approach.

Question 2:

I have a specific purpose in mind when looking at both the text and visuals in the material.
250 responses
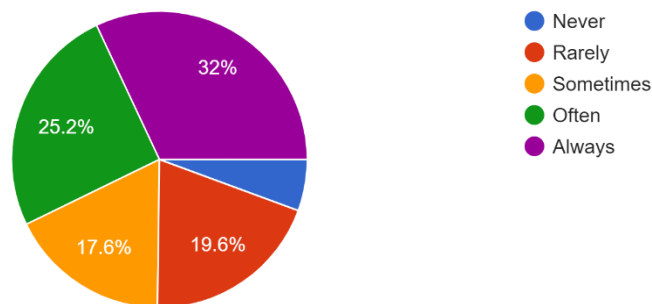
It is evident from 32% of the agreement with the statement that while interacting with the multimodal texts, students have certain purpose in their mind. To foster an insightful and deep understanding of the content, the strategic cognitive activity of the students is involved by connecting the textual and visual components.

Question3:

I focus on the main points in both the text and the visuals to get a better understanding.
250 responses

Legend:
- Never
- Rarely
- Sometimes
- Often
- Always

Pie chart values: 33.2%, 26.4%, 20%, 14%
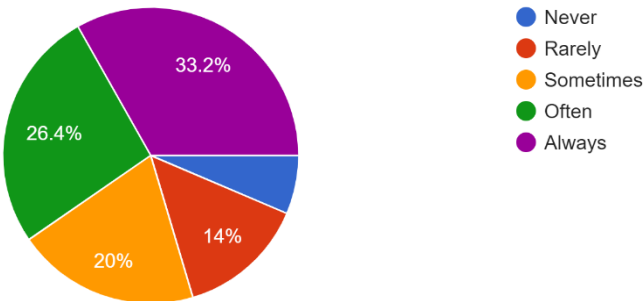
The strong agreement of the participants of 33.2% with the current statement about focusing on the main aspects and elements in both text and visuals for better comprehension highlights this as the most effective technique for comprehending multimodal texts. The great level of cognitive participation including the interest of the students to read the multimodal text is evident from their enhanced comprehension by identifying and integrating significant elements from the written and visuals texts.

Question4:

I use the visuals (such as diagrams, images, or charts) to predict what the text will discuss.
250 responses

Legend:
- Never
- Rarely
- Sometimes
- Often
- Always

Pie chart values: 32.8%, 28.8%, 17.6%, 16%
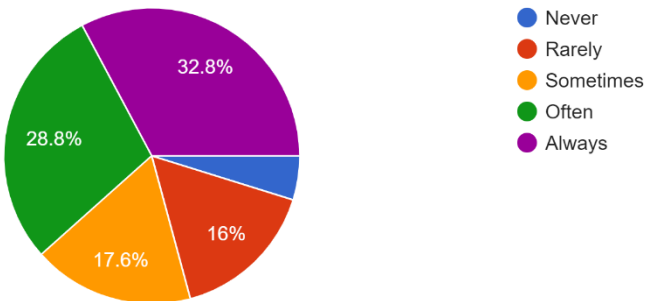
The claim that students deliberately use visual elements to forecast and interpret the text of the content has been approved by the unanimous consent of 32.8% of the students. Along with the thoughtful and precise understanding of the subject matter, the efficacy of the students to deal with the complex academic texts in a discerning and insightful way has been demonstrated through this analytical approach.

Question5:
The preliminary knowledge of the students about the connection between written text and

I think about how the visuals relate to the text before I start reading in detail.
250 responses
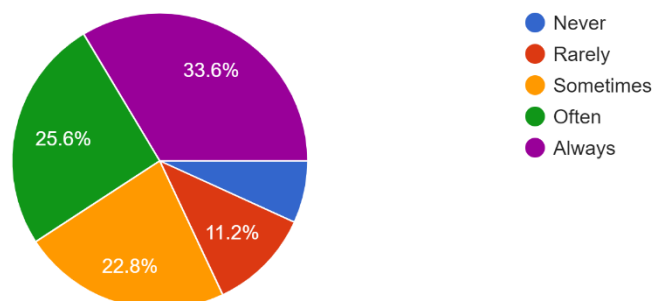
visual elements incorporated in that before even reading the text has been indicated by the unified consensus of approximately 33.6% of the participants. The interest and systematic engagement of the students with integrated text has been demonstrated through the thoughtful approach which foster the more precise and structure comprehension of the students of the challenging academic texts. The efficacy of the students to assimilate knowledge successfully and integrated information from both text and visual elements has been guaranteed through this approach.

4.6.Section 2: Problem Solving Strategies for Multimodal Texts
To explore the various techniques students, employ while interacting with the multimodal texts and encountering the challenges posed by these complicated texts is the aim of this section about Problem solving strategies for multimodal texts. Understanding the intricate visual elements, resolving the ambiguities within the text as well as the to deal with the misalignment of the text with visuals could be the potential challenges included in the procedure. The analysis of the question items of this section is as under:
Question1:

When the text becomes difficult, I rely on the visuals to help me understand the content better.
250 responses
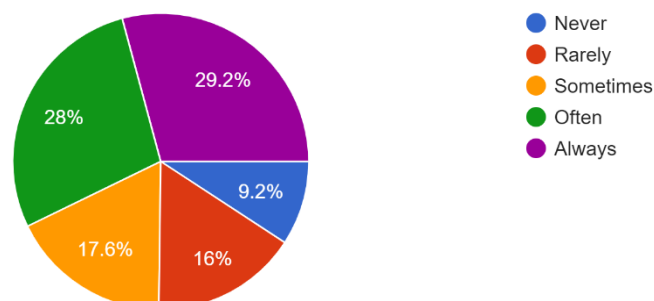
The significant role of visual components in facilitating the comprehension of intricate text of the students is highlighted by the unanimous consent of 29.2% of the participants**.** To deal with the challenges and improving the process of learning generally, the implication of visual components as the facilitating tools has been emphasized. Thus, in addition to the thoughtful

insight, the extensive and sophisticated knowledge of the complicated multimodal academic text is also promoted through this approach.

Question2:

I slow down my reading to focus more closely on the visuals when the text is complex.
250 responses
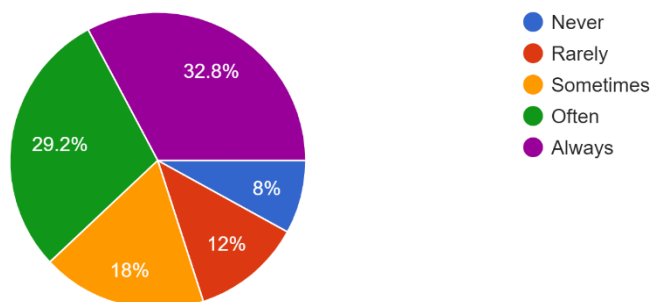
The resolute consensus of 32.8% of the participants reveals that while interacting with the intricate academic texts, students employ analytical and profound methodologies to concentrate on the visual element. To aid students deal with and resolve the difficulties this approach proves to be well suited in this regard by altering the visuals deliberately to meet our needs. To conclude, the identification and utilization of visual aids by students can lead to the deeper insight of both the complicated content as well as subject matter of the whole body of the text.

Question3:

I re-read sections of the text if the visuals suggest something that I missed or misunderstood.
250 responses
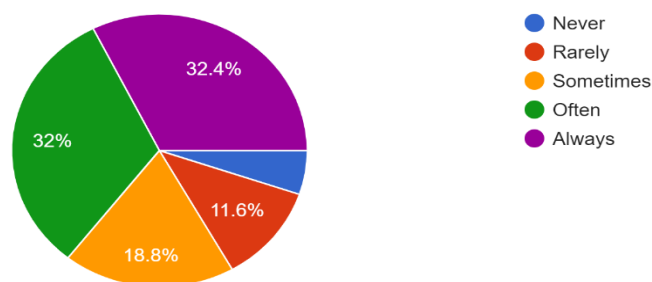
A claim the students utilize visual elements such as pictures, charts and diagrams as effective tools to gain thoughtful insight and clarity of the text has been approved by the 32.4% of the agreement of the students. The multifaceted purpose which the current strategy serves is both the assimilation and unification of the data from both sources as well as the resolution of the vague details of the text. The profound passion to gain a concise and in-depth comprehension of the main idea has been demonstrated by the interest of the students to go back and reread the text. Therefore, it has been depicted that in order to enhance their learning outcome as well as to ensure the nuanced understanding of the complicated academic texts how do students shape their reading techniques.

Question 4:

I compare the information in the visuals with what the text says when I encounter a challenging passage.
250 responses
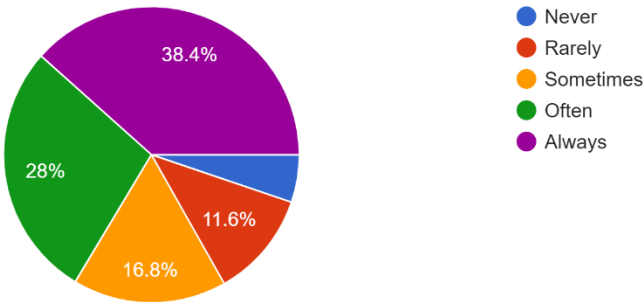
The analytical approach of comparing the information in the visuals with the idea of text while encountering the intricate passages has been strengthened by the sound agreement of 38.4% students. This strategy of comparison involves the cross-referencing of the visual components including charts, graphs and images with the relevant text. Students can decode the intricate text by identifying and resolving contradictions between the written text and visuals Implication of this strategy focus the efficacy of the students to interact with the texts that are multimodal and how they can effectively use visual aids as an integral component of their problem-solving abilities arsenal, which ultimately leads to more beneficial educational results.

Question5:

I use the visuals to infer or guess the meaning of parts of the text that are unclear.
250 responses
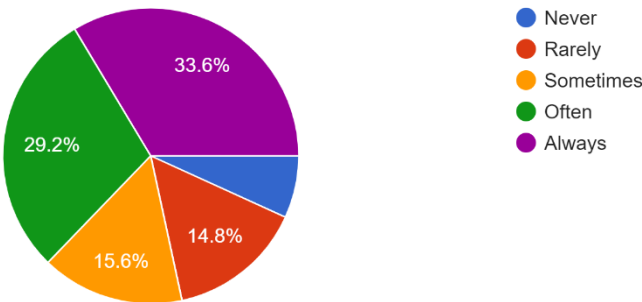
To resolve confusions and enhance understanding, the efficacy of students to utilize visual aids has been demonstrated by the unified consent of 33.6% students. To develop knowledgeable opinion regarding the ambiguous and challenging passages in the content, the use of visual aids including images, graphs and charts has been promoted by this approach. The constructive use of visuals which in turn facilitates the active and productive engagement

of the students with the content using multimodal resources for the enhanced understanding has been highlighted as a thoughtful strategy.

4.7.Section 3: Supportive Strategies for Multimodal Texts

It is significant to explore and identify the supportive material and elements within the multimodal text in order to examine how these elements facilitate the students when they deal with and seeks to enhance their comprehension of the complicated text containing various modes of expressions. Thus, the support strategies students employ to enhance their learning as well as skills to address challenges they face, all are explored in this section. Considering the use of these support strategies, this section intends to contribute to the knowledge of the instructors to guide them to shape their teaching approaches according to the needs of the students to deal with the multimodal text. The aid of insights obtained from this analysis will enable the teachers to create improved instructional methods and support systems that are suited to the needs of students dealing with intricate, multimodal academic content. The analysis of the question items of this section is as under:

Question1:

I take notes about both the text and visuals to help me remember important information.
250 responses
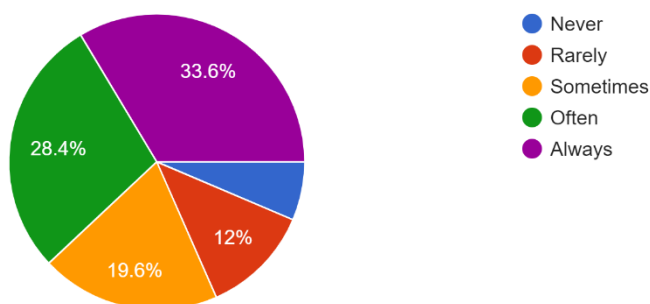
The significance of the note taking while dealing with multimodal text is evident from the agreement of 33.6% students. The proactive approach of taking notes about both the written text and visual elements enhance their understanding and retention of the information. The importance of proactive engagement and precise note-taking is emphasized for enhancing comprehension and achieving academic excellence. This excellence can be achieved by documenting the information from both text and visuals using the systematic and purposeful approach to reading

Question2:

I underline or circle parts of the text and the corresponding visuals that are important for my understanding.
250 responses
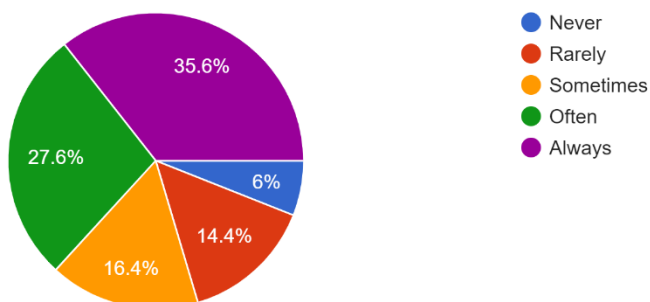
The assertion that to focus on the most relevant details of the text, students employ annotations and highlighting as the thoughtful strategies, is proved to be exactly right with the unanimous agreement of 35.6% students. The habit of student to highlight the significant details demonstrates their proactive engagement with the text and efficacy to retain the pertinent knowledge. To conclude, it can be regarded that the understanding and reinforcement of the crucial ideas in the text integrated with visuals are emphasized through the dynamic strategy of circling and highlighting the significant details from the text as well as visuals.

Question3:

I discuss both the text and the visuals with others to clarify or deepen my understanding.
250 responses
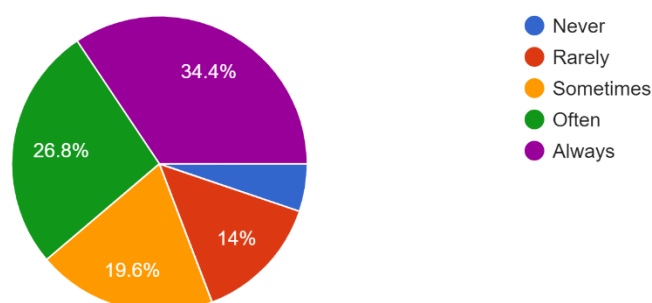
Promoting the collaborative approaches to deal with the multimodal text, a substantial amount of agreement from 34.4% of students has been received. The significance of social interactions and inclusive strategies has also been demonstrated through this anticipatory technique. Therefore, the collaborative interactions, inclusive educational approaches and discussions about the academic texts are encouraged to deepen the understanding and collect diverse perspectives from various sources.

Question 4:

I use additional resources, such as references or guides, to better understand the visuals in the text.
250 responses
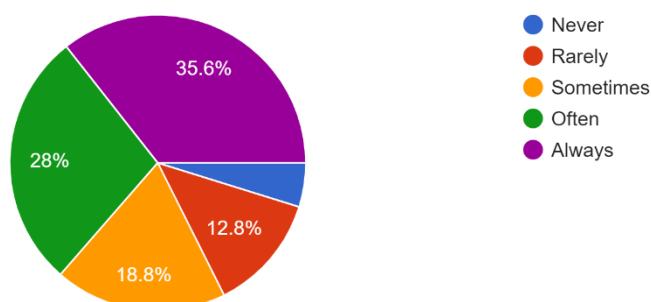
It has been suggested by the unified consent of 35.6% of the students that to improve their understanding of the texts with multiple modes of expression, they actively seek the assistance from the outside resources. The efficacy of the students to resolve the confusions and gain the thoughtful insight of the visual elements that would have been challenging to interpret on their own is assisted through the use of additional resources. The profound

passion of the students to deal with the challenging text and improve their learning is evident from their proactive engagement with the multimodal texts. Thus, the use of additional outside resources is emphasized to enhance the comprehension and the learning outcomes.
Question 5:

I write summaries that include information from both the text and visuals.
250 responses
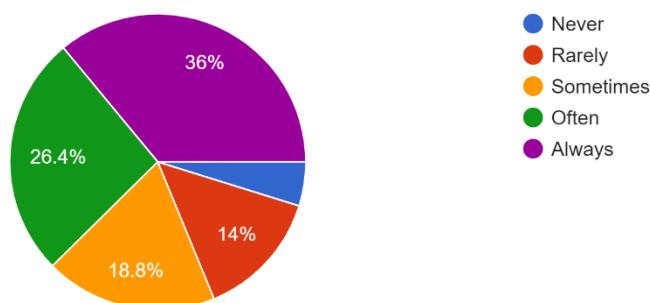
Writing summaries combining the details from both the text and the visuals is proved to be the most efficient technique while reading the multimodal text through the strong agreement of the 36% students. This strategy also promotes the assessment of the significance of the text and visual element in relation to the whole content. The technique of writing summaries has been exhibited as analytical methodology to arrange and interpret the academic text. Thus, the ability of the students to synthesize knowledge from various resources which helps them to gain logical and comprehensive overview of the content is appreciated and encouraged through this strategy.

4.8.Section 4: Post- Reading strategies with Multimodal Texts
For the enhanced comprehension in the setting of academic reading, post-reading strategies play an essential role while dealing with the multimodal texts incorporating visual element along with the text. Post-reading strategies are actually the critical methods and approaches to aid the retention of the knowledge after working with the text integrated with visuals. To develop the problem-solving abilities, improved retention and enhanced comprehension, these tactics of post-reading are essential.

These post-reading strategies not only guides the students to develop the precise comprehension of what they have read but also assist them in becoming critical thinkers. By scrutinizing the preconceived notions presented by the text and the visuals, critical thinking of the student can help developing the profound comprehension of the content. The main aim of the section is to investigate that how students employ post-reading strategies to read and comprehend the multimodal texts in order to promote the constructive learning. The analysis of the question items of this section is as under:

Question1

After reading, I review the visuals to reinforce what I learned from the text.
250 responses
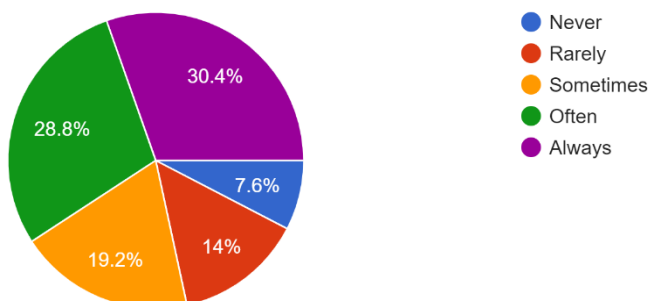
By garnering the unanimous agreement of 30.4% students, the statement about the reinforcement of the learning from the text demonstrates the strategic approach students employ to comprehend the academic texts. By supporting and enhancing each other, these post reading strategies promotes the advantages of multimodal learning. In the educational settings, the significance of the visual elements is not only highlighted as an additional resource but their efficacy to allow the students to revisit them promoting the general comprehension and retention of the information is also emphasized.

Question 2

I check how the information in the visuals aligns with my understanding of the text.
250 responses
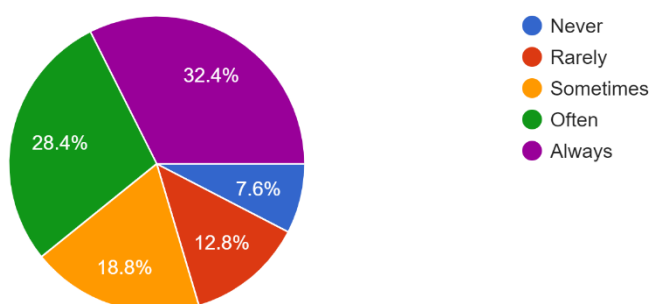
Unanimous consent of 32.4% students with the statement about the verification of the data in the visual components indicates that students proactively participate in cross-referencing written and visual materials to guarantee precision and coherence in their insights. This procedure also involves looking for the perfect alignment of the text with the visual components rather than any contradiction among any of them. To foster the precise and thoughtful information of the academic text including multi modes of expression, the technique to align text with the visuals assist the reader to a greater extent. While traversing the academic text, their systematic and critical approach is demonstrated though these strategies.

Question 3

I use both the text and visuals when explaining or summarizing the material to someone else.
250 responses
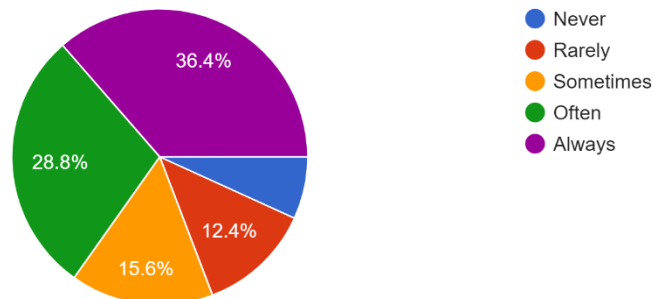
The significance of the supportive roles played by the text and the visuals in enhancing the comprehension and retention of the information is emphasized through the strong agreement of 36.4% students on the question about utilizing both while summarizing the text. Students can convey material in a variety of ways by combining text and images, which can help their audience grasp it more thoroughly and comprehensively. This approach also shows how well-versed in the subject the students are in combining knowledge from several sources to create a coherent presentation. Additionally, since teaching or summarizing information to others is proven to improve retention and comprehension, this exercise supports what they have learned before.

Question 4

I think about how the visuals added to my understanding of the text after I finish reading.
250 responses
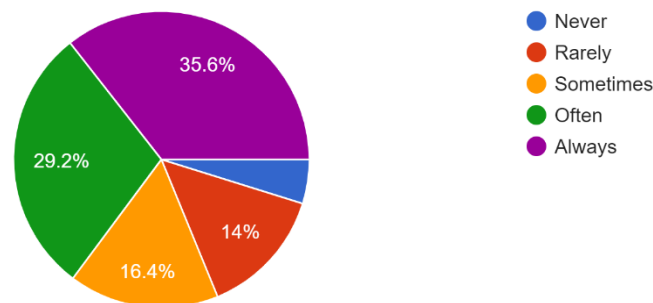
Reflective engagement of students with multimodal texts is shown by their agreement of 35.6% with the statement. Students who reflect on the importance of visuals might recognize the ways in which these components have contributed to the understanding of difficult concepts, added context, or presented other viewpoints on the subject matter. Thinking about the proactive role visuals play to enhance understanding and complement textual information, students who engage in this reflective process are better able to assimilate the knowledge and develop a more thorough and integrated comprehension of the subject matter.

Question5

I go back to the visuals when I need to recall specific details from the text.
250 responses
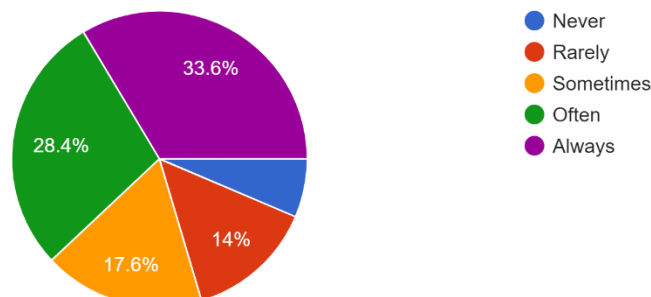
Recognition of the pictures as a significant tool for retaining and recalling the information has been demonstrated through the unified consent of33.6% participants. The text alone might not have deepened their understanding which is ensured by the quick access to the certain visual elements. Thus, the significance of recalling visual cues is acknowledge by the people as the effective tactic to ensure the retention of the knowledge. . Moreover, to enhance not only the comprehension but retention also, students can get involved in the proactive cognitive process of learning through the use of available visual cues. The inclusion of the visual elements in the instructional material is emphasized by this strategy not only considering it as the most effective and necessary requirement for promoting constructive and effective learning but to assist the students in their struggling areas as well.

5.Findings and Conclusion

To explore and investigate the strategies employed by the students of O Levels to enhance their understanding of academic novels integrated with visuals was the main goal of the study. The results provide several important insights regarding their reading habits. Before beginning a comprehensive reading assignment, students exhibited efficient application of global reading strategies by skimming both the text and the images. This method assists children in developing clear reading objectives and a general comprehension of the material. Students focus more intently and improve understanding when they use images to anticipate the topics covered in the text. When faced with challenging areas, students use problem-solving techniques to overcome obstacles. As supplemental tools, they slow down their reading speed to pay closer attention to intricate images. When faced with difficult passages, they evaluate textual and visual information, reread sections of the text if visuals indicateinformation they missed, and extrapolate meanings from visuals. These techniques are essential for getting over obstacles and combining data from texts and images. When it comes to support strategies, students use a variety of methods to solidify their comprehension. They take notes on the text as well as the images, highlight or circle key passages, talk to others about the material to get clarification, and use extra resources to help them understand the images. Creating summaries using text and images helps readers recall and integrate knowledge even more. Following reading, students use both images in explanations and summaries, ensure that the visuals support what they have learned, and revisit the visuals to reinforce what they have learned. In order to remember the pertinent details, they go back to the images and analyze how these add to their comprehension. To enhance the comprehension of the academic novels read by the students, the proactive technique of synthesizing and retaining the information using visuals has been

emphasized.The efficacy of the multimodal techniques is highlighted for the enhanced comprehension and interaction with the multimodal texts. The significance of using both textual and visual elements simultaneously for the enhanced comprehension and learning outcomes has been emphasized by the theory of multimodal literacy.

The ability of the students of O Levels to employ various strategies to comprehend the multimodal text and overcome the challenges while reading the integrated text has been explored and investigated in the current study. At initial stages, the technique of previewing used by the students considering both the text and visuals to understand the text. They adopt strategies like slowing down and relying on the images to explain the details in order to overcome the difficulty while reading the intricate passages. To further deepen the understanding of the text, the strategies like note-taking, underlining and highlighting can also be utilized. For the improved comprehension and retention, students go back to the visual to confirm and match their understanding after the reading. To sum up, the significance of integrating the different modes of expression in the text as well as the ability of the students to use these multi modes strategically for the better comprehension and retention has been demonstrated by the study.

References

Abuklaish A. (2014). *Investigating the language needs of undergraduate science students in Libya* [Doctoral dissertation]. University of Southampton.

Abuklaish A. (2014). *Investigating the language needs of undergraduate science students in Libya* [Doctoral dissertation]. University of Southampton.

Aghaie R., Zhang L. J. (2012). Effects of explicit instruction in cognitive and metacognitive reading strategies on Iranian EFL students' reading performance and strategy transfer. *Instructional Science*, 40(6), 1063–1081. https://doi.org.10.1007/s11251-011-9202-5

Ahangari S., Mohseni F. (2016). The effect of awareness raising through metacognitive strategy-based instruction on ESP learners' reading comprehension. *Journal of English Language Pedagogy and Practice*, 9(18), 65–77.

Ahangari S., Mohseni F. (2016). The effect of awareness raising through metacognitive strategy-based instruction on ESP learners' reading comprehension. *Journal of English Language Pedagogy and Practice*, 9(18), 65–77

Ahmadi M. R., Ismail H. N., Abdullah M. K. K. (2013). The importance of metacognitive reading strategy awareness in reading comprehension. *English Language Teaching*, 6(10), 235–244. https://doi.org.10.5539/elt.v6n10p235

Ahmadi M. R., Ismail H. N., Abdullah M. K. K. (2013). The importance of metacognitive reading strategy awareness in reading comprehension. *English Language Teaching*, 6(10), 235–244.

Ahyar J., Sari D. K. (2018). *Challenges in designing ESP course for first year students of engineering faculty at Malikussaleh University* [Conference session]. Proceedings of MICoMS 2017 (pp. 563–568). Emerald Publishing Limited.

Ajideh P., Zohrabi M., Pouralvar K. (2018). The effect of explicit instruction of metacognitive reading strategies on ESP reading comprehension in academic settings. *International Journal of Applied Linguistics and English Literature*, 7(4), 77–86.

Ajideh P., Zohrabi M., Pouralvar K. (2018). The effect of explicit instruction of metacognitive reading strategies on ESP reading comprehension in academic settings. *International Journal of Applied Linguistics and English Literature*, 7(4), 77–86. https://doi.org.10.7575/aiac.ijalel.v.7n.4p.77

Alami M. (2016). Cross-gender comparison of metacognitive strategies utilized by Omani students in reading comprehension classes. *International Journal of Applied Linguistics and English Literature*, 5(4), 20–28.

Alami M. (2016). Cross-gender comparison of metacognitive strategies utilized by Omani students in reading comprehension classes. *International Journal of Applied Linguistics and English Literature*, 5(4), 20–28. https://doi.org.10.7575/aiac.ijalel.v.5n.4p.20

Alderson, J. Charles. 2007. Assesing Reading. UK: Cambridge University Press

Alhaqbani A., Riazi M. (2012). Metacognitive awareness of reading strategy use in Arabic as a second language. *Reading in a Foreign Language*, 24(2), 231–255

Alhaqbani A., Riazi M. (2012). Metacognitive awareness of reading strategy use in Arabic as a second language. *Reading in a Foreign Language*, 24(2), 231–255

Allington, R. L. (2012). What really matters for struggling readers: Designing research-based programs. Pearson

Alwasilah, Chaedar&Alwasilah, Senny. S. 2013. PokoknyaMenulis. Bandung: PT KiblatBuku Utama.

Alwasilah, Chaedar. 2012. PokoknyaRekayasaLiterasi. Bandung: PT KiblatBuku Utama.

Alwasilah, Chaedar. 2014. Islam, culture, and Education. Banduzng: PT RemajaRosdakarya.

Anderson, L.W., Krathwohl, D.R., Airasian, P.W., Cruikshank, K.A., Mayer, R.E., Pintrich, P.R., Raths, J., Wittrock, M.C. 2001. A Taxonomy for Learning, Teaching, and Assessing: A revision of Bloom's Taxonomy of Educational Objectives. New York: Pearso

Arabsolghar F., Elkins J. (2001). Teachers' expectations about students' use of reading strategies, knowledge and behaviour in Grades 3, 5 and 7. *Journal of Research in Reading*, 24(2), 154–162. https://doi.org.10.1111/1467-9817.00138

Baddeley, A. (1990). Human memory: Theory and practice. London: Lawrence Erlbaum Associates.

Baddeley, A. (1990). Human memory: Theory and practice. London: Lawrence Erlbaum Associates.

Beaver, J., & Carter, M. (2009). DRA2 K-8 technical manual: Developmental reading assessment, (2nd ed.). Pearson Education.

Bell, N. (1991). Gestah imagery: A critical factor in language comprehension. Annals of Dyslexia, 41,246-260.

Betts, E. A. (1946). Foundations of reading instruction, with emphasis on differentiated guidance. American Book Co.

Bialystok, E. (2018). Bilingual education for young children: Review of the effects and consequences. International Journal of Bilingual Education and Bilingualism, 21(6), 666-679.

Block, C, & Pressley, M. (2002). Comprehension instruction: Research-based best practices. New York: Guilford Press.

Block, C, & Pressley, M. (2002). Comprehension instruction: Research-based best practices. New York: Guilford Press.

Clark, H., & Clark, E. (1977). Psychology and language: An introduction to psycholinguistics. New York: Harcourt and Brace Jovanovich.

Clay, M. (1991). Reading recovery: A guidebook for teachers in training. Heinemann.

Cooney, K., & Hay, I. (2002). Using the technology of the Intemet to enhance the literacy development of secondary students with reading problems. In H. Middleton, M. Pavlova, & D. Roebuck (Eds.), Leaming in technology education: Challenges for the 21st Century (pp. 71-80). Academic Press, Brisbane.

Duke, N. K., & Pearson, P.D. (2002). Effective practices for developing reading comprehension. In A.E. Farstmp& S.J. Samuels (Eds.), What research has to say about reading instruction, 3"^ Ed (pp. 205-243). Newark, Dl: Intemational Reading Association

Durkin, D. (1978 - 79).What classroom observations reveal about reading comprehension instmction. Reading Research Quarterly, 14,481 - 533.

Erickson, F. (1986). Qualitative methods in research on teaching. In M. C. Wittrock (Ed.), Handbook of research on teaching (3rd ed., pp. 119-161). Macmillan.

Fountas, I. C., & Pinnell, G. S. (2016). Benchmark assessment systems: Years K-2, levels A-N. Heinemann