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## Building Better Readers: The Power of Active Reading in English Language Learning

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### Abstract

Active reading is a conscious, cognitive process which helps learners to form a meaning of the texts, not only by decoding words. Active reading skills are very critical in the case of undergraduates whose academic performance is very much dependent on the capability of reading huge amounts of complex reading materials. It, unlike passive reading, is linear in that the exposure to the text is not reflected upon, and active reading entails prediction, questioning, summarization, annotation, and metacognitive monitoring. These tactics assist understanding, memorization as well as critical analysis of scholarly material. Students who use active reading strategies have been found to do better on comprehension tests and have enhanced abilities in synthesizing knowledge in different disciplines.

Nevertheless, a significant number of undergraduates join college or university without being taught on how to read actively. Research indicates that students tend to rate their reading comprehension abilities too highly and they apply to simple techniques such as highlighting or re-reading, which has little effect on deeper learning (Teaching strategies which involve active reading skills (e.g., reciprocal teaching, preview, question, read, reflect, recite, review, and Cornell note-taking) have shown positive results in academic outcomes. This paper will discuss the theoretical bases of active reading, summarize empirical data about its effectiveness among undergraduates, and suggest instructional strategies that lead to the adoption of those strategies. It claims that active reading is not inborn but acquired with the help of a scaffold, feedback and practice. It presents the future research directions, which entail the necessity to transform the active instruction of reading to digital and multimodal texts that define modern academic settings.

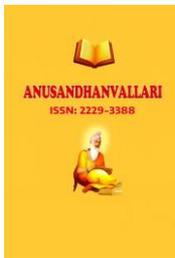
**Keywords:** Active reading, metacognition, reading comprehension, higher education, digital reading etc.

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### Introduction

Active reading is a thoughtful and active process that involves individuals engaging with the text to generate meaning, detect new information and connect it to the previous information, as well as keep track of their comprehension as they develop and read. Active reading allows the cognitive resources to work more intensively unlike passive reading, which is a more superficial and non-strategic approach to reading. During active reading, works are organized based on previewing the text, asking questions, making notes, summarizing, and estimating arguments to improve comprehension and remembering (Afflerbach, Pearson and Paris, 2008). Passive reading, conversely, is commonly used to denote the process of merely reading the text one word after another without critical thinking, analysis or trying to get beyond the surface level of the text (Pressley et al., 1992). Passive readers simply take the text as it is, but the active ones are ones who will inquire and want to get things straight and create associations with what they already know.

It is difficult to overestimate the significance of active reading in undergraduate studies. The nature of undergraduate education is such that students have to work with large amounts of complicated academic literature, including textbooks, reference works, and specialized journal articles. This academic content can be critical in



determining the success in higher education through capacity to comprehend, analyse and synthesize. Active reading will enable undergraduates to process such information through creating deeper understanding of information, improved storage of ideas, and acquisition of critical thinking skills that are essential in reading of scholarly material. Moreover, active reading leads to the transfer of knowledge which allows students to use their acquired knowledge in various fields. It has been established that students with active reading skills have higher academic achievements, and they are able to comprehend and synthesize ideas in different subjects (Dunlosky et al., 2013).

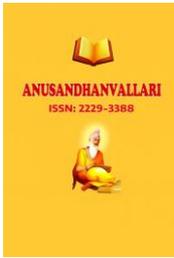
### **Cognitive Psychology for Reading Enhancement**

Cognitive psychology offers major information on the development of reading comprehension and the processes that occur during text understanding. Cognitive theories suggest that, reading comprehension is a dynamic process, where lower-level processes, which include word recognition and word decoding, and higher-level processes, which include inference and idea generation and monitoring comprehension (Snow, 2002). Interactive model of reading holds that the interaction between bottom-up and top-down offers comprehension. In bottom-up processing, the readers read the text by identifying the words and decode them on the letter, word and sentence level. In the top-down processing, the reader uses his or her previous knowledge, expectations and predictions in interpreting the text in a meaningful manner. These are processes that tend to go hand in hand since the reader modifies his or her interpretation of the text in line with the situation and with previous information, and as the text content continues to change (Rumelhart, 1977; Stanovich, 1980). It has been argued that good readers are those who are able to combine the two forms of processing as they continuously make predictions and inferences as they decipher the text.

Another principle concept in cognitive psychology is the schema theory which gives importance to the role of pre-established knowledge in understanding. In this theory, the readers make use of mental frames, or schemas, which assist them in interpreting and organizing new information (Anderson and Pearson, 1984). An example here is that when a reader reads a piece on a subject that is already familiar to him or her, the reader will be able to quickly add the new information to the previous knowledge and thus understand and retain it better. Through such strategies as summarization, questioning, and prediction, active reading can assist students to solidify such schema connections, thus, allowing them to comprehend and retain academic content on a more profound and lasting level.

A number of the strategic reading models can help shed more light on the processes that are involved in active reading. An example of such model is the Transactional Theory of Reading and Writing suggested by Rosenblatt (1978) according to which reading is not a matter of passive receipt of information but an active interaction between the text and the reader. The reader is pre-determined to this transaction, depending on his background, purpose and interest in the reading. This interaction creates the meaning co-constructively, with the active involvement of a reader into the process of reading being stressed. In this perception active reading is not just a process of understanding the text, but also one of interacting with it, challenging it, and applying his or her own experiences and knowledge to the reading matter.

The other significant model is an interactive model of reading that was acquired by Rumelhart (1977) and Stanovich (1980). The model emphasizes the manner in which the readers apply the bottom-up and top-down strategies in their endeavours to comprehend text. Top-down processes consist of interpreting the material based on prior knowledge, expectations and predictions, whereas bottom-up processes consist of decoding of the physical words and symbols in a text. Effective readers are the ones who are able to combine these two forms of processing, and they modify their reading habits according to the kind of reading they are undertaking and



according to the content of the context in which they are reading. As an illustration, to read an elaborate academic text, a reader may be forced to decoding the technical words slowly (bottom-up) as well as relying on his prior learning to interpret the overall argument being presented (top-down).

Metacognition is an important concept in active reading because the metacognition process includes monitoring, controlling and self-reflection of the thinking processes. Metacognition is said to be thinking about thinking and it consists of two main aspects metacognitive knowledge (knowledge of what one thinks and how) and metacognitive regulation (monitoring and controlling what one thinks and how) (Flavell, 1979; Brown, 1987). Metacognition in reading assists the learner to analyze their knowledge, detect when they are lost and determine how they can employ the best strategies to overcome the problem in understanding. As an example, a reader can notice that he or she is not comprehending a certain part and chooses to read it again or make notes to get a clear understanding. Metacognitive awareness enables readers to alter their reading techniques according to the difficulty of the text, their objectives and what they already know.

It has been found that more metacognitively aware readers are more successful in terms of their comprehension. They are also keen in checking their comprehension and use self-doubt, re-reading, and summarizing as part of their strategies to eliminate confusion and recall better (Pressley et al., 1992). Metacognition is therefore an important part of active reading that enables students to evaluate their progress and make changes to their strategies so as to ensure greater understanding and improved learning results.

### Components of Active Reading

**Previewing the text** is one of the initial actions in the process of active reading. This is done by skimming the titles, headings, subheadings, and abstracts to have an idea of the structure and key points of the content and then go deeper into the content. Through preview, the readers are able to create an expectation of what is to be in the text and in what order to understand the text. By knowing the likely content of the text based on these first indications, the reader is able to know in advance some of the main ideas, themes or points. Such a process gets the reader ready to undertake the material, by providing a framework on which to understand it. As an example, in academic reading, one can look at the abstract and headings to devote attention to the most relevant parts and to choose selectively the most relevant parts of the reading (Snow, 2002). Previews are especially useful in thick academic texts, since it allows readers of such texts to navigate through complex texts at their convenience, save on time and effort and at the same time enhance their comprehension.

Another element of active reading is **questioning** whereby questions are formulated to create questions before, during, and after reading the text. This plan stimulates the reader to get into the depth of the readings by posing questions that lead to the reading. Some of the questions to be asked before reading can be:

What do I already know about this topic?

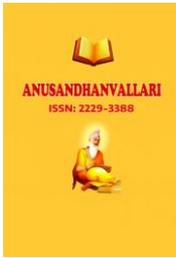
and

What do I expect to learn after reading this?

The questions may change throughout the reading during reading, to be in line with the new material as they appear,

e.g., What is the overall argument here?

or



How does this idea relate to what I already know?

It is the questioning process, which motivates the reader to be interested in what is being read and encourages active searching and information retention (Afflerbach, Pearson, and Paris, 2008). Also, self-generated questions are useful to make students track their understanding and determine where they do not get a certain point; this way, they can re-read certain text or find some clarification. Critical thinking may also be developed through this strategy when the readers examine the text and dig deeper into the meaning behind it.

**Annotating and note-taking** are also used by active readers as their means of responding to the text. The process of writing notes in the margins, underlining, or highlighting important information is called annotating and the process of jotting down a summary or important information on a separate notebook or computer is referred to as note-taking. Such activities allow the readers to actively work on the material and structure their ideas, as well as explain complicated ideas (Pressley et al., 1992). Taking notes is a personal experience of the text that enables the reader to document his or her reactions, questions, and thoughts. On the same note, taking notes, particularly by paraphrasing material using personal words, aids in fixing the knowledge and memorizing. Relationships between ideas or complex arguments can also be captured through visual representations (i.e. concept maps, charts or diagrams). These techniques allow the reader to graphically arrange the information and make substantial associations, which leads to better comprehension and better memory.

#### **Observing Comprehension: Rereading in the Case of Confusion, Self-Questioning.**

Active reading also requires monitoring comprehension as active readers must constantly check what they understand. This may be done by means of self-questioning, by which the reader poses the question to self such as,

Do I get this part?

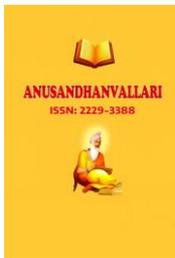
or

What is the gist of this part?

Where confusion comes about, the reader resorts to corrective measures which include rereading parts of the text, seeking clarification or changing the reading pace. In keeping track of the understanding, the readers remain conscious of the understanding they are getting in the reading process and implement a quick fix when the comprehension is disrupted. Such active interaction with the content enables the readers to see the gaps in knowledge or where they need to pay more attention. The part of comprehension is known as metacognitive monitoring which entails a constant awareness of the effectiveness of the reader in understanding the material and enables the reader to monitor his or her reading behaviour (Flavell, 1979). This element plays a crucial role in avoiding misunderstandings and warranting the critical and careful reading of the text.

#### **Summarizing and Reflecting: Generalizing the Major Ideas into Short Formulations.**

A **summary** and **reflection** play an important role in summing up the learning and increasing long-term memories. Summarization, which entails the process of grasping the main concepts of the text in brief statements, usually in written form or orally summarizing the text. This practice will entail synthesizing information, drawing key points, and eliminating minor information. Reflection is something that goes beyond the idea of summarizing the material by getting the reader to think critically about it. This may be associated with putting the content into



personal context, applying the concepts to real-life contexts or reflecting on how the reading fits into other course material or more general themes. Summarization and reflection serve to strengthen the comprehension by making the reader actively and meaningfully process the information rather than passively reading the text (Snow, 2002). These also increase retention, since the process of revisiting and rephrasing the work actively helps to increase the memory retention and gives the learner the ability to apply the learned concepts to various situations.

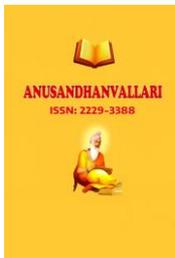
### **Normal Academic Readings and Disciplinary Disagreements**

Academic texts offered to undergraduate students are highly diverse, and it is highly differentiated by the specifics of the studies. A typical example of such texts in the humanities is literature and history: these present complex themes, character analysis, and interaction with history. In comparison, the scientific and social sciences may have more material that concentrates on empirical information, scientific research, and theory which may demand a different set of rules in active reading. The difference in the disciplinary angle of reading contents requires different approaches to effective reading. Active reading in the humanities can be close reading, highlighting passages, whereas active reading in the sciences can be pointing out major experimental procedures and findings. It is important to comprehend such differences so as to build discipline-based reading techniques that resonate with conventions and expectations of each discipline (Thomas and Robinson, 1989).

### **Difficulties of Undergraduates (e.g., Negative Response, Excessive Word Reading)**

The magnitude of academic content that must be digested is one of the major difficulties that undergraduates encounter when they do academic reading. Having several readings each week on different courses, students tend to feel overwhelmed by the number of required materials and therefore use passive approaches to reading such as skimming and reading summaries (Dunlosky et al., 2013). The other weakness is the technical language and jargon that is prevalent in most academic disciplines and hence may make understanding hard to students, particularly in sciences and social sciences. This domain-specific vocabulary does not only demand that students read more complicated words but it also demands that they comprehend those words in the context of a larger conceptual system. The challenges can be reduced through active reading, as it will motivate students to read the text on a higher level by processing information and contemplating on challenging passages and also by asking questions about words and concepts that they cannot comprehend.

It is common to find many undergraduates going to higher education with unrealistic ideas about reading. The most popular myth is that reading comprehension is a passive process, and people are mainly focused on decoding the words and not critically working with the piece. When actively engaged, students tend to think that reading the text is enough to learn and understand it whereas they are not aware of the importance of such active engagement method as questioning, annotating, and summarizing. In addition, other students erroneously think that successful reading entails reading fast and thus they end up developing a habit of reading in a hurry resulting in diminished comprehension. Students with such misconceptions have been found to have difficulties with academic texts since they do not adopt the strategies that actively facilitate knowledge acquisition and retention (Afflerbach et al., 2008). In the interest of eliminating these misconceptions and enhancing reading performance in the higher education, teaching students about the significance of active reading, as well as equipping them with practical tips that they can apply in their reading practices, can help correct such misconceptions.



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## Instructional Practices

Active reading in the classroom needs structured models which help a student to be exposed to strategies of reading texts. Workshops where special attention is paid to active reading development are one of the strategies. Some of the techniques that students can use in these workshops cover text annotation, formulation of questions, and summary of the main points. These workshops are usually characterized by the fact that they involve direct teaching as well as group tasks during which students have a chance to exchange strategies and discuss the process of reading (Pressley et al., 1992). Active reading instruction models used in classrooms may differ based on the learning objectives and the learning topic. To provide an instance, in literature classes, the teacher can demonstrate close-reading methods, paying attention to the analysis of the narrative arrangement, motifs and literary devices. In more technical subjects such as science, instructors may focus on how to obtain important data and learn about procedures in an experiment. These strategies are best learned by workshops and organised classroom models so that the students are more likely to use active reading techniques in the future by themselves.

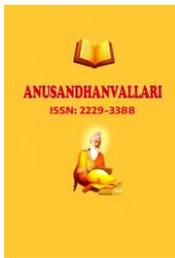
Teachers are important in active reading instruction as they not only provide appropriate reading skills but also demonstrate how content as a teacher should be engaged and think deeply about the text one is reading. One of the important functions of the instructors is to offer scaffolding- assistance that enables the students to achieve competence in reading strategies progressively. Such assistance may be in the form of guided reading activities, groups, or comments on the annotation of students. Teaching students to use the active reading strategies, instructors equip them with the necessary mechanisms of engaging themselves more actively with the academic texts (Snow, 2002).

The peer collaborative learning also helps in improving active reading skills. Students can exchange their ideas and tips when they work together; this can help them improve their reading experience. Peer discussions enable the students to hear the different interpretations of the students, challenge the decisions of others and support their own comprehension of the complicated material. Group discussions or annotations are also possible collaborative activities that can promote accountability and may encourage students to remain engaged with the text. Studies indicate that students who take up peer based learning activities, like reading groups or study sessions, are more likely to have better comprehension skills, and have a better grasp of the content (Afflerbach, Pearson, and Paris, 2008). With these interactive engagements, students do not only sharpen their active reading strategies but they are also in a position to have a deeper understanding of the content.

## Combining Active Reading with Assignments and Assessments

In an attempt to foster active reading in different contexts, the instructors ought to incorporate active reading strategies in assignments and assessment. Tasks in which students have to annotate text, formulate questions or write summaries are involving, as they encourage students to work with the given material. It is in such assignments that they go beyond the standard procedure of just responding to questions about the text and make students critically think about what they read. As an example, the students may be requested to annotate a chapter, highlighting the main points, writing marginal notes, and summarizing the section in own words with the help of which it is possible to strengthen the understanding (Pressley et al., 1992).

Assessments can also be included with active reading. Rather than just testing students in terms of their capacity to remember facts, assessments can test their skills in analyzing, questioning, and synthesizing information in texts. The instructors may develop assessments aiming on having the students prove their knowledge by writing reflective essays, critiques or even presentations where the reading material is applied to the real world. The strategy does not only help ensure that students read more carefully; it also helps to coordinate



the reading strategies with overall academic and professional objectives (Thomas and Robinson, 1989). Incorporating active reading as one of the elements of the assignment and testing procedures helps instructors to reinforce the significance of active reading rather than simply completing a reading task.

### **Distinctions between Reading on Print and Digital**

There are special problems in reading digital texts, which are not the same as reading print materials. The nature of digital reading may also promote multitasking and may bring distractions like pop-up ads, notifications, or the desire to visit other websites. This is a place where it is harder to maintain attention and be absorbed in the text (Carr, 2010). Besides, the structure of digital texts may be different compared to the print materials and such aspects as hyperlinks, multimedia, and interactive components can change the reading process. Although these functions may add more content in the form of supplementary materials or allow a nonlinear point of view, they may also interrupt the reading process, causing divided attention and reduced attention to what is read.

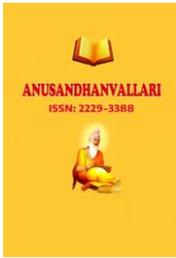
Print reading, conversely, is more likely to favour the linear reading and attentiveness. The print is tactile, and there are no external distractions that can assist readers in being more engaged in the content. The rigidity of print texts does not allow the flexibility of digital texts, however, like searching a particular word or accessing secondary resources at a glance. Therefore, print and digital reading have merits, but the latter necessitate the reader to change his/her reading pattern to address the distracters and non-linearity of the medium (Mangen, Walgermo, and Brønneck, 2013).

Hypertext navigation is one of the major challenges of digital texts reading. Digital texts, unlike print texts, are usually linear but include hyperlinks that enable the reader to move in and out of various parts of the text, outside sources or other related materials. Although this may make the reading process more interesting, because it gives the reader more context or resources, it may also break the flow of the reader and give him a disjointed reading experience (Carr, 2010). Hyperlinks can also lead to the distraction of the reader as he or she moves to different parts or other pages and forgets the point or theme of the passage.

The other challenge relating to the digital reading process is multitasking. Digitized devices can provide easy switching of readers of a task including reading a text and checking email, social media or text messages. This continual alternation of the focus may have a detrimental impact on the understanding and memory. Research has indicated that the act of multitasking during reading results in reduced memory performance and poor understanding since they share cognition resources among several tasks (Ophir, Nass, and Wagner, 2009). Active readers should also be aware of the need to fight the urge to multitask and they have to give their full attention to the text in hand. At the same time, the fulfillment of certain reading objectives, avoiding the use of devices if it is necessary to read something, and installing applications prohibiting distractions can be used to remain focused.

Students should develop measures to become efficient in reading in the virtual environment, taking into account the peculiarities of on-line texts. Among the approaches, the focus of the reading sessions is one of the priorities, which means that well, they need to be distraction-free. This may be switching off the notifications, closing unnecessary tabs, and setting a specific time to read. The second-best tactic is the application of annotation tools, which are found in most digital reading applications, which include marking important points, jotting notes on the margin, and bookmarking parts that need to be reviewed again. These are used to allow the reader to engage more actively and actively with the text in a manner that is similar to traditional annotation of print texts.

More so, chunking information is a good strategy to read digital texts. Cognitive overload could be avoided by dividing the text into small manageable portions and enhance understanding. The readers are able to



concentrate on each part separately and have short breaks between the parts to review what they have learned. Lastly, multimedia content including videos, audio, and interactive charts can also be used to improve the learning process by presenting more angles of the same subject and helping to understand, particularly complicated issues (Mangen, Walgermo, and Brannick, 2013). It is however necessary to be cautious of how these elements could interfere with the flow of reading and thus, they should be employed intentionally and in a strategic manner.

### Future Directions

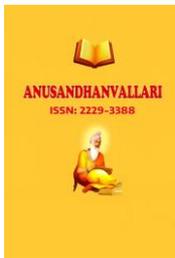
Most of the researches have been conducted on the effectiveness of active reading strategies in the short run but longitudinal research should be conducted to determine how effectively the above strategies are maintained in the long term and how they will still be effective in reading comprehension in the long term. The majority of studies have been dealing with the short-term outcomes of instructing active reading skills, e.g., summarizing, questioning, and annotating, yet the long-term outcomes are ambiguous. To illustrate, are the students who learn these techniques during the first year of their undergraduate studies still able to use them during their academic lives? Longitudinal studies would be able to follow active reading strategy use by students over semesters or years in that whether students with frequent use of the active reading strategies do better in their courses or in the long term or have knowledge retention. The studies in the field may also illuminate the causes that lead to the continued adoption of active reading strategies, including motivation, cognitive growth, and instructor support of students (Pressley et al., 1992).

### Active Reading Tools that are Enhanced by Technology

Technology-enhanced active reading tools are one of the topical areas with the growing involvement of technology in education. Digital platforms may offer learners a range of tools that may be utilized in order to improve the reading process, including the ability to annotate, real-time feedback, multimedia content, and interactive activities. Nevertheless, studies are required to determine the efficacy of these tools in enhancing closer interaction with texts. Moreover, a study can be conducted on how artificial intelligence (AI) and adaptive learning systems can be combined to tailor reading experiences to individual students to provide them with personal feedback regarding their reading progress (Mangen, Walgermo, and Brennick, 2013).

The majority of the available literature on active reading is centered on the Western students and there should be further studies to determine how the strategies of active reading are implemented in various cultural backgrounds and among various students. Cross cultural research may explore the validity of active reading strategies or they may have to be modified to reflect differences in culture regarding learning styles, education systems or reading patterns. Also, research might look at the needs of the various groups of learners, including learners with learning disabilities, English language learners, or underrepresented students. Such populations might also have special problems with reading comprehension and require specific strategies or tools. Knowledge of what various groups of people do best when it comes to reading and what can be the most effective strategies can result in more inclusive educational practices (Snow, 2002). Studies in this field can also guide in how active reading teaching can be adjusted to address the needs of the diverse student population in the world.

Active reading is one of the vital aspects that must be taught. The capacity to be able to read and respond to academic texts in depth and critically is a key to academic success and in the current environment where the academic reading volume is growing and growing, it has become an essential quality of an undergraduate. Active reading also assists students not only to master intricate ideas but also enables them to have life-long skills on critical thinking, problem solving, and synthesizing knowledge. Participation in the reading process does not only



expose students to facts but also equips them with skills to appraise and criticize as well as implement what they have learned in diverse situations. Considering all these facts that prove the usefulness of active reading, a teacher must focus on teaching students of this ability and include it in his or her program.

### **Recommendations on Undergraduate Education Policy and Practice**

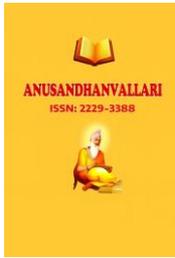
To begin with, universities need to take into account the idea of active reading being taught as part of core curriculum especially in introductory courses where students are bound to first experience academic texts. Workshops or seminars on active reading strategies would assist the students to acquire these skills at an early stage of their academic life which will put them in a position to succeed in their subsequent courses. There should also be a tendency to involve active reading in assessments that is not based on traditional testing modes but rather on the capability of students to read, analyse, and synthesize reading material. Also, digital reading tools must be incorporated in the learning environment, and the students must be ready to read digitally and print materials. The policy makers must take into account the various needs of the students and develop strategies of teaching active reading, which can accommodate all the learners and not only those who were born in different cultural background and various academic preparation levels. In such a manner, universities will be able to contribute more to the success of students and allow them to develop lifelong learning.

### **Conclusion**

This paper has discussed the phenomenon of active reading and how it is important in promoting reading comprehension and academic achievement in undergraduates. Active reading refers to a process that allows an individual to experience the text in a productive manner in relation to strategies such as previewing, questioning, annotating, tracking understanding and summarizing. These strategies have proven to enhance the understanding levels, memory levels and critical thinking which is vital in university education. The paper also discusses different teaching methods that also support the realization of these skills among the undergraduates, including classroom models, peer collaborative learning, as well as incorporation of active reading in assignments and assessment, and brings out the specificities of the digital reading while discussing the methods of applying the active reading strategies to the online context.

### **References**

- [1] Afflerbach, P., Pearson, P. D., & Paris, S. G. (2008). Clarifying differences between reading skills and reading strategies. *The Reading Teacher*, 61(5), 364–373.
- [2] Anderson, R. C., & Pearson, P. D. (1984). A schema-theoretic view of reading comprehension. In R. J. Spiro, B. C. Bruce, & W. F. Brewer (Eds.), *Theoretical issues in reading comprehension* (pp. 185–205). Hillsdale, NJ: Lawrence Erlbaum.
- [3] Brown, A. L. (1987). Metacognition, executive control, self-regulation, and other more mysterious mechanisms. In F. E. Weinert & R. H. Kluwe (Eds.), *Metacognition, motivation, and understanding* (pp. 65–116). Hillsdale, NJ: Lawrence Erlbaum.
- [4] Carr, N. (2010). *The Shallows: What the Internet Is Doing to Our Brains*. W.W. Norton & Company.
- [5] Dugaje, Manohar., Pavani, Sasidhar. Online Learning in Virtual Classes -The Learners' Views- A Perspective Study of Virtual Sessions. *Palarch's Journal of Archaeology of Egypt/ Egyptology*. 17(9). 2020. <https://archives.palarch.nl/index.php/jae/article/view/4215>



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- [6] Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013). Improving students' learning with effective learning techniques: Promising directions from cognitive and educational psychology. *Psychological Science in the Public Interest*, 14(1), 4–58.
- [7] Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American Psychologist*, 34(10), 906–911.
- [8] Mangan, A., Walgermo, B. R., & Brønnick, K. (2013). Reading linear texts on paper versus computer screen: Effects on reading comprehension. *International Journal of Educational Research*, 58, 61–68.
- [9] Ophir, E., Nass, C., & Wagner, A. D. (2009). Cognitive control in media multitaskers. *Proceedings of the National Academy of Sciences*, 106(37), 15583–15587.
- [10] Pressley, M., El-Dinary, P. B., Wharton-McDonald, R., et al. (1992). A study of strategic processing and comprehension instruction in elementary classrooms. *Contemporary Educational Psychology*, 17(2), 129–151.
- [11] Rosenblatt, L. M. (1978). *The reader, the text, the poem: The transactional theory of the literary work*. Carbondale, IL: Southern Illinois University Press.
- [12] Rumelhart, D. E. (1977). Toward an interactive model of reading. In S. Dornic (Ed.), *Attention and performance VI* (pp. 573–603). Hillsdale, NJ: Lawrence Erlbaum.
- [13] Snow, C. E. (2002). *Reading for understanding: Toward an R&D program in reading comprehension*. Rand Corporation.
- [14] Stanovich, K. E. (1980). Toward an interactive compensatory model of individual differences in the development of reading fluency. *Reading Research Quarterly*, 16(1), 32–71.
- [15] Thomas, B., & Robinson, R. D. (1989). Effects of the PQ4R method on college students' text comprehension. *Journal of Experimental Education*, 57(2), 93–101.