EXPLORING THE MENTAL PROCESSES INVOLVED IN READING COMPREHENSION, INCLUDING SCHEMA THEORY, MATACOGNITION, AND THE INFLUENCE OF BACKGROUND KNOWLEDGE.

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Annotation: This article provides an overview of the development of reading comprehension research, emphasizing studies from the last fifteen years compared to those from the preceding decades. The author discusses the historical evolution of reading comprehension research, from early interest in holistic mental processes in the early 20th century to the dominance of behaviorism. The renewed interest in reading comprehension explores the interaction of learner characteristics (background knowledge, vocabulary, metacognitive skills), text structures (narrative and expository), and social contexts. The article highlights schema theory's role in understanding comprehension and acknowledges the gaps between current research and teaching practices.

Keywords: reading comprehension, cognitive psychology, schema theory, metacognitive knowledge, background knowledge, vocabulary knowledge, narrative text structure, expository text, reading strategies, learner characteristics, text comprehension.

Introduction: The last fifteen years have seen a greater focus on reading comprehension research than the preceding sixty years. Robert Glaser proposes in the foreword of Becoming a Nation of Readers that the reading process research currently available can assist in identifying effective teaching practices and differentiating effective strategies from less useful ones (Anderson, Hiebert, Scott, & Wilkinson, 1985). This essay will provide an overview of a few studies on reading comprehension and discuss how the results should, may, and actually affect teaching methods. Firstly, we go into the causes behind the renewed interest in comprehension studies. Next, we outline the research foundations that support our understanding of how comprehension processes evolve, including a summary of both descriptive and instructive.

In fact, our interest in comprehension processes dates back to the turn of the century, when researchers like Huey (1908), Cattell (1986), and Thorndike (1917) thought reading should be the subject of in-depth investigation. Gestalt psychology, which placed a strong focus on holistic mental processes, gained popularity at this time, initially in Europe and then in the US. A setting like this encouraged research on reading comprehension as a single,

cohesive mental process. Current research validates this exact perspective: Studies looked into holistic mental processes, like how print is perceived (Cattell, 1986) and how mental set, or past knowledge, affects a situation (Huey, 1908).

The foundational ideas of current reading comprehension research were developed by these early studies. It may really shame present researchers to read Huey's Psychology and Pedagogy of Reading (1908), as it appears that little has changed since then in terms of our grasp of the subject. The slow progress in psychology between 1915 and 1970 can be attributed to the persistent impact of the behavioral tradition that ruled the field at that time. The focus of behaviorism was on analyzing observable actions or occurrences. Reading was seen as a phenomenon outside the purview of experimental psychology since it was thought to be essentially a mental event. Reading studies began to focus only on observable features of reading, not the process itself. Reading research started to take on a "product orientation," with emphasis on performance on reading proficiency tests and accuracy in oral reading. Reading comprehension was portrayed on these assessments as a broad range of distinct, reversible subskills. The strong connection to these tests led to an excessive focus on phonics. Whichever movement was the source and which the effect, these movements did, in fact, enhance each other. While the evaluation of reading comprehension processes was highly complex, the evaluation of phonic skills—such as letter sound knowledge, blending abilities, auditory perception, and discrimination—was comparatively straightforward. Since many believed that after pupils had "broken the code," and "could listen what they themselves said" comprehension would naturally follow, the process of understanding was viewed as a "by-product,"

Understanding the interacting elements that support learners' development of efficient reading techniques and motivation to read is crucial since reading is an interactive process. To put it another way, it's critical to comprehend the context of reading. Selected research on learner traits, text features, and social environment is presented in the following sections. The reviewed literature encompasses both descriptive and intervention research, which aim to modify the learners', text's, or social context's existing characteristics. Learner characteristics encompass a range of aspects, including background information, metacognitive skills, vocabulary knowledge, motivation, social and cultural background, ability, gender, and developmental stage. While some of these can be changed with instruction, others cannot. on this section, we review the literature on three areas that are especially pertinent to problems in education and responsive to treatments meant to improve

reading comprehension responses: background information, lexicon, and metacognitive understanding

Background knowledge. It should come as no surprise that background knowledge is one of the learner characteristics that has been examined the most, and that its impact on reading comprehension is the main topic of this work. This study is the consequence of advancements in cognitive psychology, such as the creation of schema theory, which has led to a shift in the understanding of reading research and practice (Anderson & Pearson, 1984). The foundation of schema theory is the idea that a person's stored knowledge, or what we commonly refer to as long-term memory, is the methodical personal arrangement of all of that person's experiences. Our preexisting knowledge affects how we interpret new information. For instance, the majority of adults have a strong schema for restaurants. When you place an order for food from a menu, waiters or waitresses receive your order, and you pay for your meal when you've finished. You would draw connections between what you were hearing and your prior knowledge of dining at a restaurant if someone started talking about what transpired while having lunch with a friend. You would fill in the 'slots' in your restaurant schema as you listened.

Vocabulary knowledge. Measures of vocabulary knowledge and reading comprehension levels have a well-established correlation (see Anderson & Freebody, 1981). It's unclear what this relationship's nature is. Depressing outcomes have been reported from attempts to improve reading comprehension by vocabulary education (Ahlfors, 1980; Evans, 1981; Pany & Jenkins, 1978). As was covered in the preceding section, reading comprehension is known to be aided by prior knowledge. Hence, some have contended that the correlation between vocabulary and comprehension results from the fact that vocabulary knowledge is essentially a gauge of prior knowledge and shouldn't be regarded as a distinct important component in reading comprehension (Johnston, 1983). Nonetheless, more recent research on vocabulary teaching intervention has been successful in raising students' comprehension.

Metacognitive knowledge. Learners not only have worldly knowledge, but they also have metacognitive knowledge regarding the reading process. Metacognition has come to refer to the comprehension and proper application of cognitive processes and techniques. These metacognitive processes can be conceptualized as follows: knowing that (declarative knowledge), knowing how (procedural knowledge), and knowing when and why (conditional knowledge) (Paris, Lipson, & Wixson, 1983). Alternatively, these processes

can be thought of as knowledge of self, knowledge of the task, and self monitoring (Flavell, 1979; Garner, 1987; McNeil, 1987). Declarative knowledge, for instance, would include information about how to read, such as the fact that it's a process, that background knowledge is helpful, and that various texts should be read at varying speeds depending on their intended use.

In order to create meaning from text, the learner's involvement is crucial, but other elements also play a significant role. The underlying tenet of the interactive reading approach is that understanding is the product of the reader and text creator working together to jointly generate meaning. The nature of the text has been the subject of research on a variety of topics, such as the kinds of reading instruction materials (basal readers, for example), narrative text structures and associated instructional strategies, expository text structures ((e.g., Mandler & Johnson, 1977; Meyer, 1975; Stein & Glenn, 1979), the extent to which these texts are written and structured in a way that is considerate of readers' expectations and prior knowledge, and instructional interventions to improve text-based learning. These concerns are the main topics of discussion for narrative and explanatory material in this section.

Narrative text. The foundation of reading teaching is narrative literature, or stories, especially for basal readers. Although narrative grammar is a common term used to describe a tale's structure, scholars have also used terms like story schema, story map, story frames, and others to convey the same concept. Research has shown that those who are more proficient in story grammar are typically better readers of narrative texts (Fitzgerald, 1984; Mandler & Johnson, 1977). These readers benefit from knowing story structure because it allows them to predict what will be covered next, which improves comprehension, and it provides an organizing framework for linking disparate pieces of information, which improves recollection.

Expository text. Descriptive studies of the various text structures used to transmit information were the starting point for research on explanatory text structures. Meyer and Rice (1984) recognized invention, arrangement, and style as rhetorical structures, and much of this work expanded on these findings. For instance, expository text structures include antecedent/consequent, reaction, comparison, collection, and description, according to Meyer (1975). Research on the relationship between such "pure" structures and those that are actually discernible in basal and content area materials was a second line of descriptive research that expanded on the work that outlined the structures utilized in informational

writing. In their analysis of social studies materials, Schallert & Tierney (1982) discovered that most texts employed a combination of structures within a particular selection as opposed to the pure forms that were identified.

Conclusion. I have made an effort to present knowledge from recent research in my review, which highlights the ways in which readers, text, and context interact and affect kids' text comprehension. It is evident that there are still large gaps between our current understanding and ongoing practice, even while there is a great deal of knowledge regarding the comprehension process and key instructional elements connected to comprehension training. It is also evident that educators in general and instructors in particular possess the knowledge necessary to implement significant changes to education and resources. Instructors can significantly alter the type of reading comprehension training they teach if they are familiar with the research that is discussed in this article.

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