

Reading Difficulties in Contemporary Education: From Decoding Problems to a Multidimensional Understanding of Reading

Dr Kameli Ibtissem²

Abstract

Reading is a fundamental educational skill and a major condition for successful learning across school subjects. However, reading difficulties remain a significant challenge for many learners. They are often associated primarily with difficulties in decoding written words, yet reading is a complex activity involving several interacting cognitive, linguistic, metacognitive, emotional, and educational processes. This theoretical article proposes a multidimensional understanding of reading difficulties that goes beyond decoding problems. It examines the contribution of reading comprehension, vocabulary, prior knowledge, working memory, attention, inference, metacognition, motivation, and the educational environment. The article argues that reading difficulties should not be interpreted exclusively as individual deficits but should also be understood in relation to the learning conditions provided to students. From this perspective, effective educational support requires more than additional decoding exercises. It requires differentiated instruction, explicit teaching of comprehension strategies, development of metacognitive skills, appropriate scaffolding, and attention to learners' emotional and motivational experiences. The article concludes by proposing a multidimensional pedagogical perspective in which reading difficulties are understood as the result of interactions between learner characteristics, reading processes, and educational contexts.

Keywords: reading difficulties; reading comprehension; decoding; metacognition; vocabulary; working memory; motivation; differentiated instruction; reading pedagogy; educational support.

1. Introduction

Reading occupies a central position in contemporary education. It is not only a specific school skill but also a fundamental means through which learners access knowledge in almost every academic discipline. Success in science, history, mathematics, social sciences, and many other areas depends partly on the ability to understand written information.

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² University of Constantine 2-Abdelhamid Mehri, LPPE: Algeria. E-mail: ibtissem.kameli@univ-constantine2.dz,
<https://orcid.org/0009-0004-6917-6247>

For this reason, difficulties in reading can have consequences that extend far beyond language classes. A learner who struggles to understand written instructions may encounter difficulties in mathematics. A student who cannot efficiently process a complex text may experience difficulties in science or social studies. Reading difficulties can therefore progressively affect academic achievement, motivation, participation, and the learner's perception of his or her own abilities.

Reading difficulties are nevertheless often approached from a relatively narrow perspective. Attention is frequently focused on the learner's ability to recognize letters, establish sound-symbol correspondences, decode words, and achieve reading fluency. These processes are undoubtedly important. A learner cannot understand a text efficiently if basic word recognition remains highly effortful.

However, successful reading involves much more than decoding.

Reading requires the learner to construct meaning, connect information, interpret implicit ideas, activate prior knowledge, understand vocabulary, monitor comprehension, and adjust reading strategies according to the demands of the text.

This observation leads to a central argument:

Reading difficulties cannot be fully understood through decoding difficulties alone.

A learner may decode words accurately while experiencing substantial difficulties in understanding a text. Another learner may have adequate comprehension when texts are simple but struggle when linguistic complexity, length, or inferential demands increase. Others may understand texts but lack motivation, appropriate reading strategies, or confidence in their abilities.

Reading difficulties are therefore heterogeneous.

The purpose of this theoretical article is to develop a multidimensional understanding of reading difficulties and to examine its implications for educational practice. The article argues that reading should be considered as the result of an interaction among several dimensions: **decoding, language, cognition, comprehension, metacognition, affect, and educational context**.

Such a perspective has important implications for teachers. If reading difficulties are multidimensional, educational responses must also be multidimensional.

The objective should not simply be to provide more reading exercises. It should be to identify the processes that create difficulty and to provide learners with appropriate forms of support.

2. Rethinking Reading Difficulties

A first step toward a multidimensional approach is to reconsider what is meant by reading difficulty.

Reading difficulty can refer to persistent problems experienced by a learner when acquiring or using reading skills. These problems may concern different components of reading and may vary considerably from one learner to another. For instance, while the "simple view of reading" highlights the necessity of both decoding and linguistic comprehension, modern research demonstrates that reading failure often involves additional self-regulatory and cognitive processes not captured by this traditional binary (Duke & Cartwright, 2021).

Some learners experience difficulties primarily in decoding. They may read slowly, confuse letters or sounds, struggle to recognize words automatically, or require considerable effort to identify written forms.

Other learners decode relatively accurately but experience difficulties in comprehension. They may read the words correctly but fail to construct a coherent representation of the text. These individuals often possess the necessary word-level proficiency but encounter obstacles in extracting literal and inferred meanings from linguistic discourse (Hoover, 2023, p. 2281; Tetzlaff et al., 2023, p. 7).

Still others may experience difficulties related to vocabulary, attention, working memory, inference, or the use of reading strategies.

This diversity is educationally important because similar observable outcomes can result from different underlying processes.

Two students may both obtain a low score on a reading comprehension task, but for different reasons. One may have difficulty decoding the text. Another may decode successfully but have insufficient vocabulary. A third may understand individual sentences but fail to connect information across the text. A fourth may possess the necessary cognitive skills but lack motivation and persistence.

Treating all these students in the same way would therefore be pedagogically problematic. Consequently, interventions must be multicomponent and aligned with the specific reading profile of each learner to effectively address these distinct underlying deficits (Daniel & Barth, 2023, p. 252).

A multidimensional approach requires teachers to move from the question:

“Does this learner have difficulty reading?”

to more precise questions:

“Which aspect of reading is difficult for this learner?”

and:

“Under which conditions does the difficulty emerge?”

This shift changes the educational response.

Rather than considering reading difficulty as a fixed characteristic of the learner, it becomes possible to examine the interaction between learner characteristics and educational demands.

This does not mean that individual cognitive or linguistic differences should be ignored. On the contrary, identifying these differences is essential. However, they should be interpreted within a broader educational context. Indeed, comprehension should be viewed as a dynamically varying product influenced by the specific interaction between the reader's component skills and the unique linguistic features of the text (Francis et al., 2018, p. 278).

Reading difficulties are therefore best understood as **multidimensional and heterogeneous educational phenomena**.

3. Beyond Decoding: The Cognitive Dimensions of Reading

3.1 Decoding and Fluency

Decoding represents a fundamental component of reading. It involves transforming written symbols into recognizable linguistic units and words. When decoding is slow or inaccurate, the learner must devote a large proportion of cognitive resources to identifying words. As a result, fewer cognitive resources remain available for the higher-order processes required to construct textual meaning (Colombino et al., 2025, p. 106).

This can interfere with comprehension.

A learner who spends considerable effort decoding individual words may have fewer cognitive resources available for integrating ideas, identifying the main argument, making inferences, or monitoring comprehension.

Reading fluency is therefore important because efficient word recognition can reduce the cognitive effort required for basic processing.

However, fluency should not be confused with comprehension.

A learner may read quickly without understanding deeply, while another may read slowly but construct meaningful interpretations.

Educational practice must therefore avoid assuming that improved reading speed automatically means improved comprehension.

3.2 Vocabulary and Language Knowledge

Vocabulary is another important dimension of reading.

Understanding a text requires knowledge of the words used to construct it. Limited vocabulary can create significant barriers, particularly when learners encounter academic or specialized language. Furthermore, as students progress into higher grade levels, the increasing complexity of text shifts the burden from basic decoding toward a greater reliance on semantic knowledge and broader linguistic proficiency (Cervetti et al., 2020, p. 4; Uccelli et al., 2015, p. 343).

However, vocabulary is not simply a list of words that learners must memorize. It includes knowledge of meanings, relationships among words, contextual uses, and the ability to infer meaning from surrounding information.

A learner with limited vocabulary may understand simple texts but struggle with increasingly complex academic texts.

For this reason, vocabulary development should be integrated into reading instruction rather than treated as an entirely separate objective.

3.3 Working Memory and Attention

Reading also requires the coordination of multiple cognitive processes.

Working memory allows learners to temporarily maintain information while processing new information. During reading, learners may need to remember information from a previous sentence while interpreting the next one.

This becomes particularly important when texts contain complex structures, long explanations, or multiple interconnected ideas. Similarly, attention functions as a gatekeeper, enabling the reader to sustain focus on relevant textual cues while filtering out extraneous cognitive interference. Deficits in these executive functions often impede the integration of information across sentences, hindering a reader's ability to synthesize a locally coherent mental model of the discourse (Holopainen et al., 2020, p. 96).

Attention is equally important. Reading requires sustained engagement with written material and the ability to resist distractions.

Learners who experience difficulties maintaining attention may lose important information and consequently struggle to construct a coherent understanding of the text. Beyond these executive constraints, the capacity to form accurate situation models relies heavily on inferencing skills, which allow the reader to bridge gaps between explicit textual information and their existing background knowledge (Cho et al., 2015, p. 161; Keller et al., 2024, p. 22).

This suggests that reading difficulties may sometimes be amplified when the educational environment imposes excessive cognitive demands.

3.4 Prior Knowledge and Inference

Comprehension depends not only on information contained explicitly in a text but also on what learners already know.

Readers use prior knowledge to interpret new information, establish connections, and infer meanings that are not directly stated.

A learner may therefore experience difficulty with a text not because of a fundamental reading deficit but because the learner lacks the background knowledge necessary to understand its content. Consequently, effective instructional interventions must facilitate the activation and expansion of relevant domain-specific schemas to bridge the gap between internal cognitive resources and external textual demands (Espinás & Chandler, 2024, p. 2).

This has important pedagogical consequences.

Before reading a complex text, teachers can activate relevant knowledge, introduce essential concepts, clarify key vocabulary, and encourage students to formulate predictions.

Such practices can reduce unnecessary barriers and facilitate comprehension.

4. Reading Comprehension as an Active Process

Reading comprehension should not be understood as the passive reception of information.

The reader actively constructs meaning.

This construction involves identifying important information, establishing relationships between ideas, making inferences, integrating prior knowledge, and evaluating the coherence of the text. This dynamic process entails the continuous coordination of text-specific, bottom-up inputs and reader-based, top-down cognitive strategies to form a structured mental representation of the text known as a situation model (Jakobson et al., 2022, p. 2230; Verhoeven & Perfetti, 2021, p. 162).

A learner who reads every word correctly may nevertheless fail to understand the central message.

This distinction between **reading accurately** and **understanding meaningfully** is fundamental.

Educational practices should consequently move beyond questions that merely ask learners to retrieve explicitly stated information.

Students should also be encouraged to explain relationships, identify implicit meanings, formulate interpretations, justify answers, summarize ideas, and connect information to broader knowledge.

Comprehension is therefore both a cognitive and an educational process.

It develops through guided practice and through opportunities to discuss and reconstruct meaning. Furthermore, fostering a classroom environment centered on dialogically organized discussion and authentic literacy tasks encourages students to interrogate texts critically, thereby transforming passive reception into a robust inquiry process (Bernholt et al., 2022, p. 495; Brevik, 2019, p. 2286).

The teacher plays an important role in this process by making comprehension strategies explicit.

Learners should gradually become aware of what effective readers do before, during, and after reading.

Before reading, they may predict and activate prior knowledge.

During reading, they may monitor understanding, identify confusion, make inferences, and connect ideas.

After reading, they may summarize, evaluate, question, and reflect on what they have understood.

This progression leads directly to the role of metacognition.

5. Metacognition and Self-Regulated Reading

One of the most important dimensions of reading development is the learner's ability to regulate his or her own reading activity.

Effective readers do not simply process words. They monitor their understanding.

They recognize when a text becomes difficult, identify possible sources of confusion, and modify their strategies accordingly.

Metacognitive reading involves several processes:

- planning how to approach a text;
- monitoring comprehension during reading;
- identifying difficulties;
- selecting appropriate strategies;
- evaluating the quality of understanding.

Learners experiencing reading difficulties may not always know why they are having difficulty. They may continue reading despite losing the meaning of a passage, or they may reread repeatedly without changing strategy. By developing metacognitive awareness, however, students can learn to evaluate their cognitive processes and adjust their tactics when they notice a breakdown in comprehension (Connor, 2016, p. 272; Momdjian & Chidiac, 2025, p. 2803).

For this reason, teaching reading should include explicit instruction in **how to monitor comprehension**.

Students need to learn that not understanding a passage is not simply a failure. It is information that should guide the next action.

A learner who recognizes confusion and knows how to respond to it is developing self-regulated learning.

This perspective changes the teacher's role.

Instead of simply correcting comprehension errors, the teacher can ask:

What made this passage difficult?

Which strategy could help you understand it?

What did you already know about this topic?

Which part of the text caused confusion?

Such questions help learners become increasingly aware of their own cognitive processes.

6. The Emotional and Motivational Dimensions of Reading Difficulties

Reading is not purely cognitive.

Learners' emotions, motivation, confidence, and attitudes toward reading can strongly influence their engagement with texts.

Repeated failure can produce frustration and negative expectations. A learner who repeatedly experiences difficulty may gradually develop the belief that reading is something he or she cannot do successfully. This cycle of diminished self-efficacy often leads to avoidance behaviors, which further restrict the exposure necessary to improve decoding and comprehension skills (Noureddine et al., 2024, p. 476; Rasmussen & INCE, 2017, p. 2200).

This can create a negative cycle:

Reading difficulty → failure → reduced confidence → avoidance → less practice → continued difficulty

Breaking this cycle requires more than cognitive instruction.

Learners need experiences of success.

They also need tasks that are challenging but achievable, feedback that focuses on progress, and opportunities to develop a positive relationship with reading.

Motivation is particularly important because reading development requires sustained practice.

A learner who avoids reading has fewer opportunities to develop fluency, vocabulary, comprehension, and strategic competence.

The emotional dimension of reading difficulties should therefore be incorporated into educational support. Researchers suggest that embedding self-regulated learning strategies into interventions can address these motivational deficits by providing students with the tools to plan, monitor, and reflect on their reading performance (Cirino et al., 2016, p. 451; Roberts et al., 2018, p. 134).

Teachers should avoid defining learners exclusively through their difficulties. A student should not become “the weak reader” in the classroom.

A human-centered approach recognizes both difficulties and potential.

7. The Role of the Educational Environment

Reading difficulties should also be considered in relation to the educational environment.

Classroom practices can either reduce or amplify difficulties.

A highly standardized approach may provide the same text, the same pace, and the same task to all learners despite significant differences in reading abilities.

Differentiated instruction offers another possibility.

Teachers can adapt:

- the complexity of texts;
- the amount of scaffolding;
- the pace of reading;
- the type of questions;
- the amount of background information;
- the opportunities for oral discussion;
- the forms of feedback.

Such adaptations do not necessarily mean lowering educational expectations.

The objective is to provide different pathways toward meaningful learning.

The educational environment also includes the family and broader social context. Access to books, reading practices at home, language exposure, parental support, and attitudes toward reading can influence learners' experiences.

For this reason, addressing reading difficulties requires cooperation among teachers, families, and educational professionals. Furthermore, fostering autonomy and competence within the classroom serves as a crucial protective factor, as it aligns with the innate psychological needs required for sustained reading engagement (Sriganesh & Ponniah, 2020, p. 7).

The learner should not be considered solely responsible for overcoming the difficulty.

8. Toward a Multidimensional Pedagogy of Reading

The multidimensional perspective developed in this article suggests that reading instruction should integrate several complementary dimensions.

A comprehensive pedagogical approach can be organized around six components:

8.1 Strengthening Foundational Reading Skills

When decoding difficulties are present, learners need explicit and systematic support in word recognition and reading fluency. However, these interventions must avoid an exclusive focus on deficits and instead incorporate cognitive and socio-emotional strengths to foster overall resiliency.

8.2 Developing Language and Vocabulary

Reading instruction should systematically expand vocabulary and linguistic knowledge. This expansion should be contextualized within the broader framework of high-quality classroom instruction to ensure that linguistic growth remains accessible regardless of individual reading performance (Bogaert et al., 2023, p. 107).

8.3 Teaching Comprehension Strategies

Learners need explicit instruction in predicting, questioning, summarizing, inferring, connecting ideas, and identifying main information.

8.4 Developing Metacognitive Regulation

Students should learn to monitor their comprehension and select strategies according to the demands of the text.

8.5 Supporting Motivation and Confidence

Educational practices should create opportunities for success and help learners develop a positive relationship with reading.

8.6 Differentiating Pedagogical Support

Instruction should be adapted to learners' profiles rather than assuming that all reading difficulties have the same causes.

These dimensions should not be taught independently. They interact continuously.

A learner may have adequate decoding but insufficient vocabulary. Another may have adequate vocabulary but weak comprehension monitoring. Another may possess appropriate cognitive abilities but avoid reading because of repeated negative experiences. Consequently, effective interventions must move beyond singular, remediation-focused models to account for the complex interplay between cognitive deficits, linguistic foundations, and the compensatory mechanisms that influence individual learning trajectories (Snowling & Hulme, 2020, p. 673; Wigfield et al., 2016, p. 190).

The educational response must therefore be flexible.

9. Implications for Teachers and Educational Practice

A multidimensional conception of reading difficulties has several implications for teachers.

First, teachers need to develop a more precise understanding of the different components of reading. Identifying that a learner “has difficulty reading” is not sufficient. Teachers need to determine whether the primary difficulty concerns decoding, fluency, vocabulary, comprehension, attention, metacognition, motivation, or several interacting dimensions.

Second, assessment should not be limited to final comprehension scores. Observing how learners approach a text can provide important information about their difficulties. Formative data should be collected through frequent progress monitoring to adjust instructional intensity and pedagogical strategies dynamically in response to specific student needs (Benner et al., 2021, p. 839).

Third, reading instruction should explicitly teach strategies. Learners should not be expected to automatically discover how effective readers monitor and regulate comprehension.

Fourth, teachers should provide appropriate scaffolding while progressively encouraging independence.

Finally, educational support should preserve the learner's sense of competence. A learner who experiences reading difficulties should be supported without being defined by those difficulties. This requires an inclusive classroom climate that leverages resilience and persistence, ensuring that students remain motivated to engage with complex texts despite their initial obstacles (Wolf et al., 2024, p. 316).

The objective is not simply to improve reading performance.

It is to help learners become **confident, strategic, motivated, and increasingly autonomous readers**.

10. Discussion

The multidimensional perspective proposed here challenges a reductionist understanding of reading difficulties.

Decoding is fundamental, but it represents only one component of successful reading. Comprehension depends on the interaction of linguistic knowledge, cognitive resources, prior knowledge, inference, attention, metacognition, motivation, and educational conditions. Accordingly, effective instruction must prioritize the integration of these domains rather than treating them as isolated skill sets, acknowledging that proficiency requires extensive exposure to diverse textual genres (michelleduf@gmail.com et al., 2023, p. 534).

This perspective also challenges the idea that reading difficulties can always be explained by characteristics located exclusively within the learner.

The learner is undoubtedly an important component of the educational process, but learning takes place within environments.

Teaching methods, texts, classroom expectations, assessment practices, available support, and emotional climate can influence how difficulties are experienced and how learners respond to them. Furthermore, acknowledging this diversity requires moving away from a singular "gold standard" of reading proficiency to focus on how individuals can extract information pertinent to their specific goals and experiences (Huettig & Ferreira, 2022, p. 864).

Consequently, educational responsibility involves creating environments in which learners can overcome difficulties rather than simply identifying those difficulties.

A multidimensional perspective also implies a shift from **remediation toward development**.

Remediation focuses primarily on correcting weaknesses.

Development focuses on strengthening capacities.

Both approaches may be necessary, but the second provides a broader educational perspective. By aligning pedagogical support with students' unique interests and developmental needs, educators can foster a growth-oriented environment that prioritizes long-term literacy over narrow skill acquisition (Hattan et al., 2025).

A learner with reading difficulties does not simply need to eliminate errors. The learner needs to develop strategies, confidence, knowledge, motivation, and autonomy.

This is particularly important because reading is a lifelong educational competence. Therefore, shifting from a deficit-oriented diagnostic model toward an adaptive, interactionist framework allows educators to view learning challenges as a function of the interplay between student attributes and the surrounding school environment (Grigorenko et al., 2019, p. 46; Learned, 2016, p. 407).

The ultimate objective is not only to enable learners to read a particular school text successfully. It is to develop individuals capable of approaching unfamiliar texts, identifying difficulties, using appropriate strategies, constructing meaning, and learning independently from written information.

11. Conclusion

Reading difficulties represent a complex educational challenge that cannot be adequately understood through decoding problems alone. Although decoding and fluency are fundamental components of reading, successful reading also depends on comprehension, vocabulary, prior knowledge, attention, working memory, inference, metacognition, motivation, and the educational environment.

A multidimensional understanding therefore requires moving beyond the question of whether a learner can read toward a more comprehensive examination of **how, under what conditions, and with what resources the learner reads.**

This perspective has important implications for educational practice. Supporting learners with reading difficulties requires differentiated instruction, explicit teaching of reading strategies, development of metacognitive regulation, attention to vocabulary and comprehension, and consideration of emotional and motivational factors.

The teacher's role is consequently not limited to correcting reading errors. The teacher acts as a mediator who helps learners understand reading processes, develop effective strategies, overcome obstacles, and gradually become autonomous readers.

The central principle of this article can be summarized as follows:

Reading difficulty is not simply a problem of decoding; it is a complex interaction between the learner, the reading process, and the educational environment.

Adopting such a perspective makes it possible to move from a deficit-oriented approach toward a more inclusive and developmental pedagogy of reading. The objective is not merely to correct weaknesses but to create the conditions in which every learner can develop the cognitive, linguistic, metacognitive, emotional, and strategic resources necessary to become an effective and confident reader.

Ultimately, understanding reading difficulties multidimensionally means recognizing that learning to read is not only learning to decode written language. It is learning to **construct meaning, regulate understanding, engage with ideas, and use reading as a means of learning and participating in the world.**

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