



COGNITIVE AND AFFECTIVE FACTORS OF DIGITAL READING IN RUSSIAN LANGUAGE AND LITERATURE CLASSES IN MULTILINGUAL HIGHER EDUCATION

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Abstract

This article examines the cognitive and affective factors that influence digital reading in Russian language and literature classes within multilingual higher education. The study proceeds from the idea that digital text is not only a technical carrier of information, but also a psychologically active learning environment that changes attention, memory, motivation, interpretation, emotional response, and discursive behavior. In multilingual university classrooms, where students often combine Uzbek, Russian, English, and other linguistic codes, digital reading may either strengthen interpretive flexibility or produce superficial scanning, fragmented comprehension, and reduced reflective depth. The article develops a psychodidactic model for organizing digital reading of literary and academic texts in Russian language and literature courses. The model connects cognitive load regulation, affective engagement, dialogic interpretation, screen-based annotation, metacognitive self-control, and productive speech tasks. The results show that digital reading becomes educationally effective when it is guided by clear semantic tasks, emotionally meaningful textual situations, structured annotation, collaborative discussion, and transfer into oral and written professional communication. The article has practical value for teachers of Russian language and literature, curriculum designers, and specialists working with multilingual students in digitally mediated higher education.

Keywords: Digital reading, Russian language, Russian literature, multilingual education, cognitive load, affective engagement, psychodidactics, discourse competence, literary interpretation, higher education.

Introduction

Аннотация

Ushbu maqolada ko‘p tilli oliy ta‘lim sharoitida rus tili va adabiyoti mashg‘ulotlarida raqamli o‘qishga ta‘sir etuvchi kognitiv hamda affektiv omillar tahlil qilinadi. Tadqiqot raqamli matni faqat axborot tashuvchi texnik vosita sifatida emas, balki diqqat, xotira, motivatsiya, talqin, emotsional javob va diskursiv xatti-harakatni o‘zgartiruvchi psixologik faol ta‘lim muhiti sifatida baholaydi. Ko‘p tilli auditoriyada raqamli o‘qish to‘g‘ri metodik tashkil etilsa, talabalarda talqin qilish moslashuvchanligi, metakognitiv nazorat va nutqiy faollik kuchayadi; aks holda, yuzaki ko‘zdan kechirish, parchalangan idrok va reflektiv chuqurlikning kamayishi kuzatiladi. Maqolada raqamli o‘qishni kognitiv yuklamani boshqarish, affektiv jalb etish, dialogik talqin, ekranli annotatsiya, o‘zini nazorat qilish va mahsuldor nutq topshiriqlari bilan bog‘lovchi psixodidaktik model taklif etiladi.

Калит so‘zlar: raqamli o‘qish, rus tili, rus adabiyoti, ko‘p tilli ta‘lim, kognitiv yuklama, affektiv jalb etish, psixodidaktika, diskursiv kompetensiya, badiiy talqin, oliy ta‘lim.

Аннотация

В статье рассматриваются когнитивные и аффективные факторы цифрового чтения на занятиях русского языка и литературы в условиях многоязычного высшего образования. Цифровой текст интерпретируется не только как технический носитель информации, но и как психологически активная образовательная среда, изменяющая внимание, память, мотивацию, интерпретацию, эмоциональную реакцию и дискурсивное поведение студентов. В многоязычной аудитории цифровое чтение может усиливать интерпретационную гибкость и речевую активность, однако при отсутствии методической организации оно нередко приводит к поверхностному сканированию, фрагментарному пониманию и снижению рефлексивной глубины. В статье предлагается психодидактическая модель цифрового чтения, объединяющая регулирование когнитивной нагрузки, эмоционально-смысловое вовлечение, диалогическую интерпретацию, экранное аннотирование, метакогнитивный самоконтроль и продуктивные речевые задания.



Ключевые слова: цифровое чтение, русский язык, русская литература, многоязычное образование, когнитивная нагрузка, аффективное вовлечение, психодидактика, дискурсивная компетенция, литературная интерпретация, высшее образование.

Introduction

The digital transformation of higher education has altered not only the external organization of teaching, but also the internal psychology of reading, attention, interpretation, and speech production. In the traditional classroom, a literary or academic text was usually perceived as a relatively stable object: students received a printed page, followed a linear sequence, marked passages with a pencil, and entered discussion through a rhythm shaped by the materiality of paper. In the contemporary multilingual university, the same text may appear on a smartphone screen, in a learning management system, as a scanned fragment, in an online corpus, in a shared document, or as part of a multimedia environment. This change seems technical only at first glance. In reality, digital reading reorganizes the learner's cognitive route through the text. It modifies attention span, visual navigation, memory anchoring, emotional engagement, and the student's sense of responsibility before meaning. For the teaching of Russian language and literature, this issue is especially important because philological education is based on slow semantic work: students must notice lexical nuance, syntactic emphasis, metaphorical structure, narrator position, cultural reference, stylistic contrast, and implicit evaluation. These elements are not always visible to students who have become accustomed to rapid scanning, fragmentary consumption, and algorithmic switching between pieces of information.

The problem becomes more complex in multilingual higher education. Students who study Russian language and literature outside a monolingual Russian environment often work simultaneously with several linguistic systems and cultural frames. Russian may function for them as a language of education, a language of academic communication, a professional tool, a cultural resource, and sometimes a second or third language. In such a setting, digital reading can become either a powerful compensatory instrument or a serious methodological trap. On the positive side, digital tools allow students to access dictionaries, parallel texts, corpora, commentaries, audio fragments, visual materials, and collaborative annotation platforms. These resources can reduce linguistic anxiety

and support contextual understanding. On the negative side, excessive reliance on instant translation, mechanical copying, fragmented screen navigation, and superficial search habits may weaken autonomous interpretation. The central pedagogical question is therefore not whether digital reading should be used, because the university has already entered the digital text environment. The real question is how digital reading should be organized so that it supports cognitive depth, affective involvement, and discursive competence rather than replacing interpretation with comfortable intellectual shortcuts. A dictionary is useful; a student who delegates thinking to it is less so. The machine brings the ladder, but the mind still has to climb.

The aim of this article is to identify the cognitive and affective factors of digital reading in Russian language and literature classes and to develop a psychodidactic framework for their purposeful use in multilingual higher education. The article addresses the following research tasks: to define the psychological specificity of digital reading as compared with traditional text work; to determine how screen-based interaction influences attention, memory, motivation, and interpretation; to reveal the role of literary texts in regulating emotional and semantic engagement; to describe the risks of fragmented comprehension in multilingual classrooms; and to propose a model that connects digital annotation, dialogic discussion, metacognitive reflection, and productive speech practice. The scientific novelty of the article lies in its attempt to interpret digital reading not as a technological supplement to philological education, but as a psycholinguistic and psychodidactic phenomenon that directly affects the formation of discourse competence. The practical significance of the study is connected with the possibility of using its conclusions in Russian language and literature courses, teacher training, curriculum modernization, and assessment design for multilingual university students.

Materials and Methods

The research is based on a qualitative interdisciplinary design that combines psycholinguistics, cognitive psychology, linguodidactics, literary hermeneutics, discourse analysis, and competence-oriented pedagogy. The material of the study includes typical digital reading situations observed in Russian language and literature classes, methodological tasks used in multilingual university groups, literary and academic texts presented in electronic form, students' oral and written



responses to screen-based texts, and theoretical works on reading, attention, motivation, discourse competence, and digital literacy. The methodological logic of the study consists of several interconnected procedures. First, theoretical analysis was used to clarify the concept of digital reading and to distinguish it from simple electronic access to a text. Digital reading is understood here as a structured interaction between learner, screen, text, tool, task, and communicative context. Second, psychodidactic analysis was applied to identify the cognitive mechanisms that determine students' success or failure in digital text comprehension: attention distribution, working memory load, visual navigation, inferential processing, semantic integration, and metacognitive monitoring. Third, affective analysis was used to examine the emotional factors of reading: interest, anxiety, aesthetic response, empathy, confidence, frustration, and the sense of personal relevance. Fourth, discourse analysis helped reveal how digital reading tasks influence students' ability to formulate interpretation, support claims with textual evidence, shift register, participate in discussion, and transform reading into academic or professional speech. Fifth, pedagogical modeling was used to construct an integrated framework for organizing digital reading in Russian language and literature classes. The study does not claim experimental universality; its goal is conceptual precision and methodological applicability. The reliability of the analysis is supported by triangulation: cognitive, affective, linguistic, literary, and pedagogical dimensions are considered together, because digital reading is not a single skill but a complex educational event.

A special methodological principle of the study is the distinction between technological availability and educational productivity. The presence of digital devices does not automatically improve learning; it may even reduce it when tasks are vague, when students are allowed to jump between unrelated resources, or when the teacher treats digital text as a decorative version of the printed page. Therefore, the article evaluates digital reading through functional criteria: whether it helps students concentrate on relevant textual features; whether it supports comprehension rather than distraction; whether it activates emotional and value-based response; whether it develops the ability to justify interpretation; and whether it leads to productive oral or written communication. In relation to Russian language and literature, the study also uses the principle of textual density. Literary texts are viewed as especially valuable because they contain



concentrated lexical, syntactic, stylistic, cultural, and emotional information. When such texts are presented digitally, the teacher must protect their complexity from being flattened by screen habits. Digital reading becomes methodologically justified only when tools serve meaning, and not when meaning is sacrificed to tools. This principle may sound conservative, but it is simply hygiene for the intellect: the screen should be a window, not a fog machine.

Results

The results of the study show that digital reading in Russian language and literature classes is shaped by a dynamic interaction of cognitive and affective factors. The first cognitive factor is attention regulation. Screen-based reading tends to increase the number of visual and functional stimuli surrounding the text: links, menus, notifications, comment windows, dictionary tabs, translation tools, and search functions compete with the text for the learner's attention. In multilingual classrooms this competition is intensified because students often need additional lexical support and may open several auxiliary resources at once. When the task is not clearly structured, attention becomes dispersed, and students move from reading to searching, from searching to copying, and from copying to partial understanding. However, when the teacher provides a precise reading route, digital tools can support selective attention. For example, students may be asked to mark only evaluative vocabulary in one color, narrative perspective in another, and unfamiliar cultural references in a third. Such directed annotation transforms the screen from a space of distraction into a space of cognitive organization. The second factor is working memory load. Digital reading may overload students when the text is long, visually dense, and accompanied by many external resources. The learner must simultaneously decode Russian language forms, follow semantic development, compare meanings across languages, process teacher instructions, and operate the interface. This load can be reduced through segmentation: the text is divided into meaningful fragments, each fragment is accompanied by a limited task, and interpretation proceeds step by step. In this case digital format becomes helpful because fragments, comments, glossaries, and questions can be placed close to the relevant textual units. The third factor is visual navigation. Printed reading usually creates stable spatial memory: students remember that a key phrase was at the top of a page or near a margin. Digital reading weakens this anchoring when scrolling is



continuous and unstable. For this reason, digital Russian language and literature tasks should use page numbers, fragment codes, line numbering, bookmarks, and visible annotation markers. Such elements help students return to textual evidence and prevent interpretation from becoming impressionistic.

The fourth cognitive factor is semantic integration. Students often understand separate words in a digital text but fail to combine them into a coherent interpretation. This is particularly common when instant translation tools are used mechanically. A translated word may remove lexical difficulty, but it does not explain irony, metaphor, register, cultural implication, or narrative position. The research therefore confirms that digital reading must include tasks that require semantic synthesis: students should explain why a particular word is used in a particular context, how a sentence changes the emotional tone of a passage, how a metaphor shapes the reader's judgment, or how a dialogue reveals social distance between characters. The fifth factor is metacognitive monitoring. Effective digital readers ask themselves whether they have truly understood the text or merely recognized its surface. In multilingual education, this self-monitoring is crucial because students may confuse lexical recognition with interpretation. Digital platforms can support metacognition through reflective prompts: "What confused me?", "Which phrase changed my understanding?", "Which word cannot be translated directly?", "What evidence supports my reading?", and "How would I explain this passage orally in Russian?" Such questions slow down reading in the best sense. They create intellectual friction, and without some friction there is no movement of thought.

Affective factors are equally significant. The first is motivation. Digital reading can increase motivation when students feel that the text is accessible, interactive, and connected with their communicative needs. In Russian language and literature classes, motivation grows when literary fragments are linked with real speech situations: argument, apology, disagreement, self-presentation, ethical choice, professional dialogue, or intercultural misunderstanding. The second affective factor is emotional resonance. Literature is not only a source of vocabulary and syntax; it is a field of human experience. Digital presentation should not neutralize this experience by reducing the text to a set of clickable units. When students respond to a character's decision, compare emotional tones, record a short voice reflection, or discuss alternative interpretations in a shared document, affective response becomes a bridge to discourse competence. The



third factor is anxiety. Multilingual students may feel insecure when reading Russian texts, especially literary texts with complex syntax or culturally loaded vocabulary. Digital tools can reduce anxiety through dictionaries, comments, audio support, and collaborative work, but they can also increase anxiety when students are expected to process too many resources at once. A balanced model should therefore provide support without creating dependency. The fourth affective factor is confidence. Students gain confidence when digital tasks lead to visible progress: a marked text, a saved comment, a completed interpretation map, an oral response based on evidence, or a short analytical paragraph. The visibility of work is psychologically important because it turns interpretation from an invisible mental act into an observable learning product.

The study also identifies several methodological outcomes. First, digital reading is most effective when it is organized as a sequence: pre-reading orientation, guided screen annotation, interpretive discussion, language analysis, productive speech task, and reflective transfer. Pre-reading orientation prepares students by activating background knowledge and clarifying the communicative purpose of the text. Guided annotation directs attention to lexical, stylistic, and discursive features. Interpretive discussion transforms individual reading into dialogic thinking. Language analysis helps students understand how meaning is constructed through grammar, vocabulary, syntax, and register. Productive speech tasks require students to use the text as a basis for oral or written communication. Reflective transfer connects the reading experience with academic, professional, or intercultural contexts. Second, digital reading should not eliminate deep reading. On the contrary, it should be designed to protect deep reading from the habits of rapid consumption. Third, literary texts are especially useful for digital reading because they naturally combine cognition and emotion. A literary passage obliges students to understand not only what is said, but how it is said, by whom, to whom, with what implication, and with what value orientation. Fourth, digital reading supports discourse competence only when students must produce meaning after reading. If the final result is only a correct answer, the task remains narrow. If the final result is a justified interpretation, a spoken argument, a comparative comment, or a written reflection, reading becomes a mechanism of communicative development. Fifth, the teacher's role changes from information transmitter to designer of cognitive and affective conditions. The teacher must regulate the amount of text, the number of tools, the type of annotation, the



rhythm of discussion, and the form of output. This is not less work than traditional teaching; it is simply a different architecture of work.

Discussion

The findings of the study allow us to reconsider several common assumptions about digitalization in language and literature education. The first assumption is that digital tools automatically modernize teaching. This view is attractive but weak. A scanned textbook on a screen is not a modern methodology; it is paper wearing a digital hat. Real modernization begins only when the teacher understands how the screen changes cognition and how digital affordances can be used to support interpretation. In Russian language and literature classes, modernization should not mean replacing literary discussion with presentations, or replacing reading with hyperlinks. It should mean creating a more precise relationship between text, attention, emotion, and speech. A digital environment is valuable when it makes students more active, more reflective, and more responsible before the text. If it makes them faster but shallower, it has failed educationally, however shiny the interface may be.

The second assumption concerns the opposition between cognitive and affective learning. In practice, these dimensions are inseparable. Students do not interpret a literary text only with logical operations; they also bring curiosity, resistance, empathy, cultural memory, anxiety, and expectation. Conversely, emotional response without cognitive discipline may remain vague and subjective. A psychodidactic approach to digital reading must therefore combine affective involvement with textual evidence. When students react emotionally to a passage, the teacher should not suppress the response; instead, the response should be redirected toward analysis: which word created this impression, which syntactic structure intensified the feeling, which narrative detail changed the reader's attitude, which cultural code shaped interpretation? In this movement from feeling to evidence, literature becomes a training field for mature discourse. Such maturity is particularly important in multilingual education, because students must learn to express not only information, but also evaluation, disagreement, doubt, and ethical position in a language that may not be native for them.

The third assumption concerns the role of translation tools. Digital translation is often treated either as a threat or as a universal solution. Both positions are too primitive. Translation tools can support multilingual students when used as



auxiliary instruments, but they cannot replace philological thinking. A student may translate the word “толка” into another language, but the cultural, emotional, and stylistic depth of the word cannot be fully captured by one equivalent. This is precisely where Russian language and literature classes should work most actively. Teachers can ask students to compare machine translation with contextual meaning, identify what is lost, and explain why a literal equivalent is insufficient. Such tasks transform digital tools into objects of critical reflection. Instead of forbidding technology, the teacher civilizes it. That is a reasonable pedagogical compromise: the tool may enter the classroom, but it should wipe its boots at the door.

The fourth assumption concerns student independence. Some educators believe that digital natives naturally know how to work with digital texts. This is a myth with excellent marketing and poor evidence in classroom reality. Many students are skilled at navigating interfaces but weak at sustained interpretation. They can find information quickly, but they may not evaluate it deeply. They can copy a fragment, but they may not explain its function. They can use an online dictionary, but they may not understand why one word rather than another creates a stylistic effect. Therefore, digital reading literacy must be taught explicitly. Students need models of annotation, strategies for controlling attention, criteria for evaluating interpretation, and habits of returning to textual evidence. In Russian language and literature education, this means that the teacher should demonstrate how to read digitally: how to slow down, how to mark, how to compare, how to question, how to summarize, and how to turn reading into speech.

The fifth issue concerns assessment. Traditional assessment often checks whether the student has understood the plot, translated vocabulary, or reproduced a prepared interpretation. Such assessment is insufficient for digital reading. More valid indicators include the ability to annotate a passage meaningfully, identify relevant textual evidence, explain the effect of language choices, formulate a supported interpretation, compare digital and printed reading experiences, use auxiliary tools critically, and produce coherent oral or written discourse after reading. Assessment should also include metacognitive indicators: students should be able to describe what helped them understand the text, what distracted them, which digital tool was useful, and where they still need support. These indicators are not decorative. They reveal whether students are becoming autonomous readers or merely successful users of external assistance. The goal is



not to produce students who can click faster; the goal is to form readers who can think better.

The broader educational meaning of the proposed approach is connected with the preservation of deep reading in a time of accelerated digital communication. Russian language and literature courses have a special responsibility in this regard. They are among the few university disciplines that can still insist on nuance, ambiguity, voice, style, ethical tension, and cultural memory. Digitalization should not weaken this responsibility. On the contrary, it should make it more deliberate. If teachers organize digital reading with attention to cognitive load, affective engagement, metacognitive control, and discourse production, the digital environment can become a productive space for forming mature communicative competence. Students learn not only to read Russian texts, but to manage attention, experience meaning emotionally, justify interpretation, and enter dialogue with others. These qualities are necessary for academic success, professional communication, and intercultural interaction. In multilingual higher education, such qualities are not optional ornaments; they are core competences.

Conclusion

The study confirms that digital reading in Russian language and literature classes is a complex psychodidactic phenomenon determined by cognitive and affective factors. Its effectiveness depends not on the mere presence of digital devices, but on the quality of pedagogical organization. Attention regulation, working memory load, visual navigation, semantic integration, and metacognitive monitoring define the cognitive side of digital reading, while motivation, emotional resonance, anxiety, confidence, and value-based involvement define its affective side. In multilingual higher education these factors become especially significant because students must process Russian texts through several linguistic and cultural frames. The proposed model shows that digital reading should be organized as a purposeful sequence that includes orientation, annotation, interpretation, language analysis, speech production, and reflection. Such a sequence allows teachers to transform screen-based reading from fragmented information consumption into a disciplined form of semantic, emotional, and discursive development.



The main theoretical conclusion is that digital reading should be studied and taught as an interaction between text, mind, emotion, language, and technology. The main practical conclusion is that Russian language and literature teachers need not reject digital tools, but they must subordinate them to philological and psychological aims. Digital annotation, dictionaries, shared documents, audio support, and collaborative platforms are useful when they lead students toward deeper understanding, not away from it. Literary texts remain central in this process because they activate both cognitive precision and affective response. They teach students to notice nuance, interpret voice, feel ethical tension, and formulate responsible speech. Therefore, the digital environment should not be understood as a replacement for deep reading, but as a space where deep reading must be consciously protected and methodologically renewed. For multilingual university students, such reading becomes a foundation for discourse competence, intercultural sensitivity, academic literacy, and professional communication. The article's conclusions may be used in curriculum design, teacher training, task development, and assessment modernization in Russian language and literature education.

References

1. Bakhtin, M. M. (1981). *The Dialogic Imagination: Four Essays*. Austin: University of Texas Press.
2. Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.
3. Lotman, Y. M. (1990). *Universe of the Mind: A Semiotic Theory of Culture*. Bloomington: Indiana University Press.
4. Vinogradov, V. V. (1980). *Selected Works: On the Language of Fiction*. Moscow: Nauka.
5. Shcherba, L. V. (1974). *Language System and Speech Activity*. Leningrad: Nauka.
6. Leontiev, A. A. (2003). *Foundations of Psycholinguistics*. Moscow: Smysl.
7. Verbitsky, A. A. (1991). *Active Learning in Higher Education: Contextual Approach*. Moscow: Vysshaya shkola.
8. Kramersch, C. (1993). *Context and Culture in Language Teaching*. Oxford: Oxford University Press.



9. Widdowson, H. G. (1978). *Teaching Language as Communication*. Oxford: Oxford University Press.
10. Iser, W. (1978). *The Act of Reading: A Theory of Aesthetic Response*. Baltimore: Johns Hopkins University Press.
11. Rosenblatt, L. M. (1978). *The Reader, the Text, the Poem: The Transactional Theory of the Literary Work*. Carbondale: Southern Illinois University Press.
12. Halliday, M. A. K. (1994). *An Introduction to Functional Grammar*. London: Edward Arnold.
13. Gee, J. P. (2011). *An Introduction to Discourse Analysis: Theory and Method*. New York: Routledge.
14. Fairclough, N. (1992). *Discourse and Social Change*. Cambridge: Polity Press.
15. Carter, R. (1997). *Investigating English Discourse: Language, Literacy and Literature*. London: Routledge.
16. Leech, G., & Short, M. (2007). *Style in Fiction: A Linguistic Introduction to English Fictional Prose*. Harlow: Pearson.
17. Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257-285.
18. Mayer, R. E. (2009). *Multimedia Learning*. Cambridge: Cambridge University Press.
19. Kintsch, W. (1998). *Comprehension: A Paradigm for Cognition*. Cambridge: Cambridge University Press.
20. Wolf, M. (2018). *Reader, Come Home: The Reading Brain in a Digital World*. New York: Harper.