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Developing primary school students' language skills from a critical thinking perspective: a methodological system

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This study focuses on developing the skills of primary school students to prepare them for the challenges of the 21st century, enabling them to be literate, capable of engaging in culturally sophisticated communication, thinking critically, solving problems, and productively creating projects. The primary goal is to propose a methodological system for developing language skills in primary school students through the lens of critical thinking. The components of this model—such as objectives, active learning tasks, teaching methods, technologies, forms, digital resources, content of the elective course, and expected outcomes—serve as the foundation for identifying possibilities to cultivate students' language skills. One of these possibilities involves the design and implementation of the elective course "Linguistic Skills." This course is designed to enhance students' linguistic competencies through critical thinking-based approaches, utilizing integrated learning methods that incorporate cross-disciplinary themes.

KEYWORDS

critical thinking, language skills, methodological system, primary school, possibilities, elective course

1 Introduction

1.1 The issue of teaching from the perspective of critical thinking

Every nation in the world requires a high-quality education system that fosters the development of the knowledge, skills, and values necessary for individuals to thrive and succeed in the context of a globalized economy. Such a system not only supports personal and professional growth but also contributes to local and global progress.

In his address "The Third Modernization of Kazakhstan: Global Competitiveness," Nazarbayev (2017) emphasized the importance of educational programs aimed at the development of critical thinking abilities and independent information-seeking skills as a fourth priority.

Consequently, teaching critical thinking has emerged as one of the key 21st-century competencies (Greenhill, 2010). This skill is essential for all individuals, including primary school students (Sitopu et al., 2024).

Critical thinking is a cognitive process that encompasses the systematic and reflective analysis, evaluation, and synthesis of information (Irwan et al., 2024). It comprises the ability

to identify problems, gather and evaluate relevant information, analyze arguments, recognize assumptions and biases, consider multiple perspectives, draw logical conclusions, and assess the implications of decisions or actions (Cleovoulou, 2021).

This process requires the use of higher-order cognitive skills such as interpretation, analysis, evaluation, inference, explanation, and self-regulation. When applied appropriately, these skills increase the likelihood of reaching a logical conclusion or solving a problem effectively (Dwyer et al., 2014). In essence, critical thinking is the ability to think clearly and rationally about what to believe or what actions to take. This capacity is vital for navigating the complexity and uncertainty of the modern world (Purba, 2022).

A review of the scientific literature highlights the crucial role of critical thinking in education. The incorporation of critical thinking into school curricula has been actively examined since at least the early 20th century, influenced by the ideas of John Dewey (Bean, 2011). Facione (1990) argues that the development of critical thinking skills should be a goal at every level of schooling (K–12). Consequently, critical thinking instruction should be seamlessly integrated into daily educational activities (Bailin et al., 1999).

It is particularly significant to introduce critical thinking at an early age. Ennis (1989) believes that the best time for teaching critical thinking is primary school. Research conducted by scholars (Kennedy et al., 1991) demonstrated that such teaching provides significant benefits to young children. Early education fosters peer interactions that strengthen critical analysis and communication skills (Walsh and Elmslie, 2005), prepares children to face the 21st-century challenges (Rosidah et al., 2024). Cultivating critical thinking at an early stage promotes the development of social skills and enhances learning outcomes (Payler et al., 2017).

In general, this requires incorporating instruction of critical thinking into primary school curricula as a key strategy for cultivating 21st-century skills and lifelong learning.

1.2 Language skills of primary school students

The research is grounded on the development of 4th-grade primary school students' Kazakh language skills, specifically listening, speaking, reading, and writing, through the application of critical thinking strategies. According to the State Compulsory Education Standard for Primary Education (2018), the harmonious formation and development of the learner's personality require the cultivation of a broad set of skills, including the ability to think critically, to master various modes of communication (particularly language skills), and to work both collaboratively and independently. These competencies are crucial for fostering the intellectually developed, linguistically proficient, a subject-knowledgeable personality of a primary school student.

In global practice, the development of language skills is achieved through the cultivation of four key skills: speaking, listening, reading, and writing. For primary school students, these skills play a crucial role in establishing effective communication with the external environment. Each of these skills has unique characteristics and specific methods of development. By fostering language skills, primary school students develop functional literacy, which includes abilities such as speaking coherently, writing accurately, applying literary

norms appropriately, understanding word meanings, and expanding vocabulary. All of these competencies are achieved through the systematic development of the four skills.

According to Ozhegov's (2010) Explanatory Dictionary, "language is a historically developed system of phonetic, lexical, and grammatical means that objectifies thought processes and serves as a tool for communication, exchange of ideas, and mutual understanding among people in society. Speech is the ability to speak; the act of speaking."

According to Muhayyo (2025), students' academic success and social development are closely linked to the development of language skills. In her study, the author examines the impact of active teaching methods aimed at developing students' language proficiency. Therefore, considering speaking, reading, and writing as distinct forms of speech activity, we will further explore the methods and strategies that effectively contribute to the development of these skills.

Zhumabayeva and Omarova (2019), exploring language skills, identify listening, speaking, reading, and writing as distinct forms of speech activity.

Omarova (2020) describes reading as "a communicative process carried out through written texts in the native or foreign language."

The significance of these four skills in the learning process has also been addressed by the Turkish scholar Sadiku (2015). In his study, he argues that the integration of listening, speaking, reading, and writing enables students to achieve high performance in developing speech competencies and contributes to the formation of communicative skills. Listening and speaking work in close interconnection and play a key role in the development of oral communication skills. Reading and writing, by contrast, serve as tools for written communication.

Thus, language skills function as a primary means of communication. The process of transforming thought into material form, into words, is realized through language. Primary school students must not only comprehend spoken ideas through language skills but also learn how to listen, read, and write effectively. Competent speech fosters competent understanding.

As Zhusupbekova (2018) notes in her study, listening and speaking are components of verbal competence. Listening is characterized as an active and creative process involving the perception, comprehension, organization, and retention of information. Speaking is an active process of expressing and conveying ideas orally. In contrast, reading and writing represent the non-verbal aspect of linguistic competence, relying on the graphic system of language. Reading is a cognitive process aimed at understanding the meaning of a text, carried out through the reception, interpretation, and analysis of textual information. Writing, meanwhile, is a complex process involving the construction of written messages that require accurate formulation of thought.

Kulmagambetova (2014) describes these four skills as follows:

- Speaking involves expressing thoughts through linguistic units during interactions with others. This skill is categorized as a productive skill, as it requires active creation and articulation of ideas.
- Writing encompasses the use of language to convey information in written form. This process includes connecting letters, words, and sentences to articulate ideas on paper. Like speaking, writing is also a productive skill.
- Reading involves understanding a text by interpreting its meaning. This skill is classified as a receptive skill, as it requires comprehension rather than production.

- Listening is the ability to process and understand the auditory meaning of language. It is also considered a receptive skill, as it focuses on receiving and interpreting spoken language.

Overall, language skills manifest through listening, speaking, reading, and writing, functioning as distinct processes with their specific roles and characteristics. These skills serve as essential components for students to carry out a wide range of academic and communication activities.

Based on the above considerations, language skills can be viewed as an integrated set of skills, such as listening, speaking, reading, and writing, that collectively facilitate effective communication.

2 Possibilities for developing primary school students' language skills from a critical thinking perspective

By fostering language skills in primary school students, it is possible to shape learners who are critical thinkers, capable of analyzing information, engaging in effective communication, participating actively in group work, and developing holistically. In this context, tasks aimed at developing language skills in educational programs not only enhance cognitive activity—an essential condition for quality education—but also contribute to building functional literacy. As Cananau et al. (2025) argue that critical thinking is a concept whose meaning is constituted by contemporary theoretical models.

In our research, we identified several possibilities for developing primary school students' language skills from a critical thinking perspective. Analyzing the content of textbooks such as Kazakh Language (Zhumabayeva et al., 2019), Mathematics (Akpayeva et al., 2019), Literary Reading (Muftibekova and Ruskylbekova, 2019), and Natural Science (Turmasheva et al., 2019), we discovered key areas for integrating critical thinking into language skill development:

The first possibility involves implementing educational activities aimed at developing language skills from a critical thinking perspective when planning and organizing the learning process. This possibility serves as the foundation for the development of the methodological system's content.

The second possibility lies in the integration and organization of active learning tasks into the educational process, specifically aimed at developing speaking, reading, and writing skills. These tasks are designed to promote the exploration of language units, the application of grammar, vocabulary, and communication functions; the development of literacy and ability to convey ideas effectively; and the acquisition of sub-skills for reading (such as reading for comprehension, silent reading, reading for specific information, detailed reading, etc.). They also support learners in understanding the phonological aspects of language.

The third possibility focuses on integrating and organizing active learning tasks that target the development of speaking, listening, reading, and writing skills in the learning process.

The fourth possibility emphasizes equipping teachers with methods and strategies for critical thinking-oriented teaching and ensuring their effective application in the classroom.

The fifth possibility involves utilizing digital platforms to support the development of language skills through critical thinkingoriented activities. The sixth possibility is the integration of a 34-h elective course program, titled "Language Skills," into the learning process, specifically designed to enhance primary school students' language skills.

Moreover, this set is intended to ensure the effective development of language skills.

Thus, the identified set of possibilities is intended to ensure the effective development of language skills. These possibilities form the foundation of the methodical system, which content is operationalized via active learning tasks, effective teaching methods and technologies, and an adaptable elective course program.

3 Methodical system

A literature review reveals that several scholars have provided definitions of the term "methodical system" in their research. Studies indicate that the methodological system is conceptualized as a comprehensive model of the pedagogical process (Kraevsky, 1994), a set of methods, forms, and tools aimed at planning the educational process (Krysko, 2000), and an interconnected collection of components such as objectives, tasks, methods, tools, and forms (Stefanova, 1996). Furthermore, it is described as the scientific planning of the educational process that integrates theoretical and practical training (Shakiyeva et al., 2023; Yesnazar et al., 2024).

The components of a methodological system include objectives, tasks, materials, tools, methods, methodologies, and more. Nearly all these components are influenced by the element of interaction. Interaction, in this context, refers to the way components within the system relate to one another and the connections between their properties. It serves as a linking mechanism that binds essential relationships within the system (Zhiyashova, 2022).

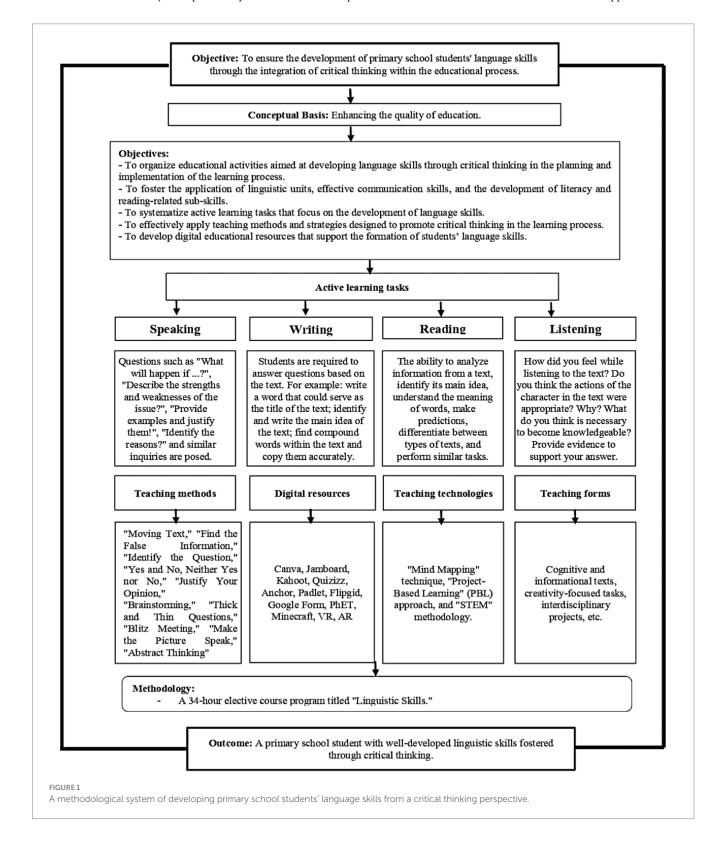
3.1 Conceptual foundations of the methodical system

To implement these possibilities, it becomes essential to develop a methodical system aimed at fostering primary school students' language skills from a critical thinking perspective. The methodical system we have designed is oriented toward developing learners who can critically analyze information, express their thoughts clearly and competently during communication, and formulate independent judgments. This system facilitates the formation of linguistic competencies such as speaking, listening, reading, and writing skills. Additionally, it promotes lexical and grammatical literacy, comprehension of the phonetic and semantic meanings of language, vocabulary expansion, and other related knowledge and abilities. The development of these skills is facilitated by the active learning tasks incorporated into the methodical system. A detailed explanation of these tasks is provided in Section 3.3.

The development of the methodical system is grounded in the primary education curriculum. Its conceptual foundation lies in enhancing the quality of education for primary school students. Within this framework, the methodological system for developing language skills through critical thinking in primary school students is outlined in Figure 1.

3.2 Aim and objectives of the methodical system

The methodical system we have developed is designed for 4th-grade primary school students studying in the Kazakh language. It can be implemented in general education schools. The elective course included in the system provides possibilities to develop students' language skills from a critical thinking perspective. Additionally, the methodical system serves as a practical resource for both learners and primary school teachers. It offers methodological support in the form of active learning tasks aimed at developing listening, speaking, reading, and writing skills; strategies and techniques for fostering language and critical thinking abilities; and information on various instructional formats and approaches etc.



The primary aim of the methodical system we have developed is to ensure the development of primary school students' language skills through the integration of critical thinking into the educational process. To achieve this aim, the following objectives have been identified:

- Implementing and structuring educational activities that foster the development of language skills from a critical thinking perspective during the planning and organization of the learning process.
- Facilitating the application of linguistic units, effective communication skills, literacy development, and the cultivation of internal reading skills such as comprehension, detailed reading, and information retrieval.
- Designing and integrating active learning tasks specifically aimed at developing language skills.
- Applying effective teaching methods and techniques that emphasize critical thinking to enhance the educational process.
- Creating digital resources to support the development of students' language skills.

3.3 Active learning tasks in the methodical system

In implementing the outlined objectives, we propose tasks designed to develop language skills through the lens of critical thinking. These skills serve as essential tools for effective communication (Karasheva and Iskakova, 2020).

The first skill is aimed at developing speaking skills. The primary focus is on tasks aimed at cultivating students' ability to articulate their thoughts clearly and coherently using linguistic units. For instance, students are asked to create a list of questions that prompt higherorder thinking, such as: "What would happen if...?" "Describe the strengths and weaknesses of this issue." "Provide an example and justify it." "Identify the reasons for this outcome." While answering these questions, students learn to define their speech style, use proper intonation, and incorporate non-verbal cues such as gestures to communicate meaningfully. They also practice comparing two objects by describing their strengths and weaknesses, which engages the process of comparative thinking. Through creating and responding to higher-order questions, students develop critical thinking and speaking skills, including reasoning, justification, drawing conclusions.

The second skill underscores developing writing skills. This direction focuses on fostering literacy and the ability to express ideas in writing. Tasks include:

- Responding to a text-based activity. Students are presented with a text and must complete the following instructions, such as: "Write a word that could serve as the title of the text." "Identify and summarize the main idea of the text." "Find compound words in the text and copy them accurately." "These activities promote literacy and develop accuracy in writing."
- Reorganizing a text: Students are tasked with dividing a text into sections, arranging them in a logical order, and rewriting it. This helps students analyze the structure of the text, maintain coherence, and develop an understanding of logical and systematic organization in writing.

The third skill focuses on developing reading skills. This direction aims to build internal reading skills, such as analyzing text information, identifying the main idea, understanding word meanings, making predictions, and distinguishing text types. Tasks include:

- Reading a text and assigning it an appropriate title.
- Choosing a suitable topic for the text.
- Evaluating the truthfulness of a statement in the text and providing evidence.
- Identifying synonyms of specific words in the text.
- Finding the main idea of the text.
- Reconstructing the text and explaining its structure.

The fourth skill addresses developing listening skills. This direction focuses on understanding the auditory aspects of language, such as sound meaning, as well as comprehension of spoken content for communication purposes. Tasks gradually progress from understanding textual information to critically analyzing it. Before listening to a text, students are asked preliminary questions about the topic. Afterward, they listen to the text and respond to questions such as: "How did you feel while listening to the text?" "Do you think the actions of the character in the text were justified? Why?" "What do you think is necessary to gain knowledge? Provide evidence."

The active learning tasks proposed in the methodical system are aimed at developing primary school students' vocabulary, fostering lexical and grammatical literacy, and enhancing their skills in working with words, phrases, sentences, and texts.

3.4 Teaching methods and technologies

The active learning tasks discussed in Section 3.3 are implemented through the following instructional methods and educational technologies.

Next, we will examine the instructional methods and technologies integrated into the methodical system to support the development of language skills.

- 1. Methods aimed at developing primary school students' language skills from a critical thinking perspective (Umiraliyeva and Saparbayeva, 2018):
- Listening skills: methods include "Moving Text," "Identify False Information," "Find the Question," and "Yes and No, No and No."
- Speaking skills: methods include "Justify Your Idea," "Brainstorming," "Thick and Thin Questions," "Blitz Meeting," "Describe the Picture," and "Circle of Questions."
- Reading skills: methods include "Text Analysis," "Pause-and-Read," "Generating Questions," "Effective Questionnaires,"
 "Group Investigation," "FILA Chart," and "Think and Find!."
- Writing skills: methods include "Prediction Tree," "INSERT," "Abstract Thinking," and "Independent Opinion."

For instance, another "Reordering Sentences" method is used when working with text. In this activity, students are given a text divided into

several parts and are asked to arrange the segments in the correct order. If students demonstrate a high level of ability, an additional challenge may be introduced by inserting a sentence or passage from an unrelated text. In such cases, students should be informed that there is an extraneous sentence or section that does not belong in the text.

The "Revise the Text" method involves refining a given text by arranging its sections or sentences that have been deliberately shifted. This technique helps students develop their skills in editing and logical sequencing. It is important to guide them in recognizing the coherence and flow of ideas within the text. For example, students may be given the task: "Rearrange the sentences in this text into their correct order and rewrite the passage."

The "Compare and contrast" method plays a significant role in helping students evaluate the similarities and differences between two texts. In this activity, students are given two texts and asked to analyze and discuss how the texts are similar and how they differ.

 Digital resources and platforms enable primary school students to enhance language skills through critical thinking. They include interactive apps, gamified learning platforms, and multimedia tools. For instance: Canva, Jamboard, Kahoot, Quizizz, Anchor, Padlet, Flipgid, Google Form, PhET, Minecraft, VR, AR, etc.

For example, students were assigned a task on the topic "Bird Habitats" using the digital platform "Learningapps.org." The learners were required to select an image that matched the content of the text. After matching the images to the text on the interactive whiteboard, the students were then given the following questions: "What is the hero's name in the fairy tale? What emotions do the characters show? What is the cause of these emotions?"

3. Modern educational technologies have proven highly effective in fostering language skills through critical thinking. Examples include: Mind Mapping Technology (Busen, 2019), Project-Based Learning (PBL) (Alt et al., 2023), STEAM Technology (Erol et al., 2023), etc.

For example, the task of creating a "Mind Mapping" diagram was given to the student based on the question, "How will you spend your summer vacation?" Each branch of the map focused on different aspects such as cognitive activities, sports, travel, and so on. We will analyze and compare the students' mind maps using the comparison method. While one student highlighted the positive traits of character, another focused on describing the negative aspects.

4. Various forms of instruction enhance language skill development through critical thinking, such as cognitive and informational texts, creativity-driven tasks, interdisciplinary projects, and collaborative learning assignments.

By employing these methods, technologies, digital resources, and instructional forms, primary school students' language skills are effectively developed through the lens of critical thinking. These teaching methods and technologies will be employed to implement tasks aimed at achieving learning objectives outlined in the content of the elective course.

3.5 Content of the elective course

As part of the research, a 34-h elective course program titled "Language Skills" was developed for 4-grade students (Table 1). The primary objective of this program is to foster students' language skills from a critical thinking perspective.

The "Language Skills" elective course program is designed to develop listening, speaking, reading, and writing skills through critical thinking. It aims to equip students with the ability to communicate their thoughts systematically using linguistic units, make independent judgments, expand their vocabulary, and express their ideas clearly and culturally. Additionally, the program focuses on instilling the norms of oral and written speech, teaching the fundamentals of language culture, and fostering functional literacy.

The content structure of the elective course is based on a spiral approach, aligning with the learning objectives. It emphasizes the practical application of language skills and the development of critical thinking. The course includes activities such as formulating, reasoning, and articulating ideas competently through pair and group work. The program's unique features lie in its focus on expanding both oral and written communication skills, enhancing speech culture, analyzing, synthesizing, and comparing information in texts, as well as developing skills for making decisions, drawing conclusions, predicting, and justifying one's opinions.

The aim of the elective course is to develop 4-grade students' listening, speaking, reading, and writing skills from a critical thinking perspective.

The objectives of the elective course:

- To use linguistic units for developing listening, speaking, reading, and writing skills.
- To master the norms of oral and written speech.
- To express one's thoughts competently from a critical thinking perspective.
- To foster functional literacy.

Expected outcomes:

- Acquire foundational knowledge of linguistics.
- Master the norms of oral and written communication.
- Expand their vocabulary.
- Develop the ability to articulate their thoughts clearly and communicate respectfully during interactions.
- Establish critical thinking skills.
- Analyze and compare information within texts.
- Conduct informational searches in texts using various reading methods, identify relevant information, and analyze it.
- Perform creative tasks in accordance with genre and stylistic features.

3.6 Assessing the effectiveness of the methodical system

The components, criteria, and indicators for developing primary school students' language skills from a critical thinking perspective are as follows:

Motivational component – motivation and encouragement. Indicators: willingness to acquire new words and linguistic units;

TABLE 1 Thematic plan of the elective course "language skills."

No.	Topic	Learning objective	Hours	Learning outcome
	Introductory Lesson	Introduction to the course objectives and content	1	-
Section	on 1: Working with texts to develo	pp language skills (8 h)		
Commo	on theme: my heart beats for my nation			
1.1	Working with Texts	Highlight key points from listened material and retell the content of the text	1	Retells the content of texts in various genres
1.2	My Native Language – Evidence of My Existence	Create questions based on the text and write a creative essay	1	Formulates written questions, describes ideas, and writes essays
1.3	Greetings – The Foundation of Speech	Collect materials based on the text and uncover the main topic	1	Asks oral and written questions based on materials and discusses ideas in groups
Commo	on theme: values			
1.4	Ybyray Altynsarin – The Benefits of Diligence	Identify the correlation between the text's topic and content	1	Analyzes the meaning of the given text
1.5	Principles of Etiquette	Understand the topic and summarize ideas	2	Understands the topic and summarizes idea
1.6	The Wisdom of Ancestors and the Value of Family	Write an essay using proverbs	1	Writes essays incorporating proverbs
1.7	Those with Elder Brothers Have Support	Comprehend and describe the significance of proverbs in the text	1	Understands and describes the meaning an importance of proverbs in the text
Section	on 2: cognitive tasks for developin	ng language skills (8 h)		
Commo	on theme: cultural heritage			
2.1	National Values	Recognize and classify national values and develop analytical skills	1	Groups and presents orally based on image provided on the topic
2.2	The Kobyz – Legendary Instrument	Express a critical perspective on the main idea of an audio recording	2	Provides critical opinions on the main idea of listened material
2.3	Turkestan	Read a given text and express personal opinions	1	Reads and shares opinions on the text
Commo	on theme: professions of the future			
2.4	Who Holds the Nation's Future?	Write an essay on the importance of the nation's future	2	Writes an essay on the topic
2.5	Choosing the Right Career	Understand the importance of career choice based on audio material and make decisions	2	Understands importance and makes informed career choices
Section	on 3: critical thinking tasks for dev	veloping language skills (10 h)		
Commo	on theme: natural phenomena			
3.1	Mysteries of the World	Create riddles based on text content and provide answers	2	Composes riddles and answers based on tercontent
3.2	Tongue Twisters	Create tongue twisters from given words and discuss in groups	1	Creates tongue twisters and discusses them in groups
3.3	What is the Secret of Lightning?	Answer critical questions by deeply understanding the given text	2	Demonstrates deep comprehension of the text and responds to critical questions
3.4	Water – The Source of Life	Predict text content using diagrams or tables and reason logically	2	Predicts and logically analyzes text content
Commo	on theme: protecting the environment			1
3.5	Do not Litter – Protect the Environment	Write a text on the impact of waste using simple and complex sentence structures	2	Writes a text about the impact of waste usin simple and complex sentence structures
3.6	Wonders of the World	Study verb conjugations and conduct group debates on a given topic	1	Learns verb conjugations, engages in debates, and conducts group discussions
Section	on 4: creative tasks for developing			
	on theme: space exploration			
	The Benefits of Baikonur to Our	Read, comprehend, and summarize information on the	1	Reads, understands, and synthesizes

(Continued)

TABLE 1 (Continued)

No.	Topic	Learning objective	Hours	Learning outcome		
4.2	What Have We Learned?	Create and answer questions aimed at problem-solving	1	Develops and answers problem-solving		
		based on the text content		questions		
Common theme: journey to the future						
4.3	Using Bloom's Taxonomy	Analyze the types of Bloom's Taxonomy	3	Masters the stages of knowledge, comprehension, application, analysis, synthesis, and evaluation		
4.4	Exploring Reflection	Monitor daily emotional changes and apply reflective practices	2	Applies reflection in daily life		
Total				34 h		

interest in understanding the social significance of language; motivation to enrich vocabulary.

Cognitive component – content and knowledge-based. Indicators: comprehension of words, phrases, text, and their meaning; cognitive knowledge aimed at developing speech culture and vocabulary enrichment; ability to choose an appropriate speech style, critically analyze, and process information.

Operational component – performance and reflection. Indicators: application of language skills; ability to express thoughts accurately and appropriately; structured thinking processes; recognition and application of different speech forms.

To assess the effectiveness of the methodical system and measure the impact of the course on developing language skills from a critical thinking perspective, diagnostic methodologies and author-developed assignments are employed. Specifically:

 To evaluate students' vocabulary, Nemov's (2001) diagnostic method, "Determining Active Vocabulary," is suggested. This method aims to assess the vocabulary range of primary school students. A picture is presented to the student, who then constructs a narrative story based on it. The use of different parts of speech in the narrative is analyzed, and outcomes are evaluated according to the predetermined indicators.

The student's speech is recorded in a special protocol and is later analyzed. This protocol records the number of various sentences used, which indicate the developmental level of the child's speaking skills.

During the psychodiagnostic study, the performance results are recorded in the protocol (Appendix).

- 2. To assess language skills, specifically designed authorial assignments are offered. These assignments measure students' proficiency across ley language skills:
- Listening and Speaking: pronunciation of words, use of appropriate speech styles, competent application of language norms, and sentence restructuring.
- Writing: grammatical accuracy, coherence in sentence construction, appropriate word choice, and orthographic proficiency.
- Reading: comprehension of the text's main idea and messages.
- 3. The "Critical Thinking of Primary School Students» diagnostic method is used to evaluate critical thinking skills. Students are

given a text, for instance, "Burabay" (Appendix) and assigned tasks requiring them to analyze, summarize, and compare information.

The evaluation of the methodical system for developing primary school students' language skills of from a critical thinking perspective encompasses the following *tools*:

- Language skills assessment sheet a structured tool designed for systematically recording students' progress in listening, speaking, reading, and writing skills;
- Diagnostic tests instruments aimed at assessing students' active and passive vocabulary, speech production, critical thinking abilities, and key cognitive processes such as analysis, synthesis, comparison, and evaluation;
- Author-developed assignments specifically designed exercises targeting students' listening, pronunciation, reading, and writing skills;

To assess the effectiveness of the methodical system, the following evaluation forms and methods are employed:

- Problem-based learning (PBL): enables students to examine language-related challenges;
- Questioning: open-ended questions stimulate students' deeper thinking about language structure, meaning and usage;
- Comparative analysis: allow students to contrast various texts, arguments, and linguistic structures;
- Brainstorming: supports idea generation and thoughts organization in speaking and writing;
- Peer and self-assessment: develops cognitive awareness and self-reflection;
- Debates and role-playing: fosters reasoning, argumentation and production skills;
- Extracurricular activities: literary clubs, storytelling contests, spelling bee competitions, and theater performances help students enhance language skills;
- Formative and summative assessment Teacher observations, self-assessment check lists, control works, final test facilitates students' evaluation.

This methodical system and elective course are specifically designed for fourth-grade primary school students. At this stage, students develop the ability to:

- express critical viewpoints on a given text;
- formulate and articulate thoughts and ideas coherently;
- categorize visual information and present oral descriptions;
- comprehend textual information in depth and respond to critical questions;
- predict text content and engage in logical reasoning.

These skills and abilities are implemented on the basis of the elective course we have designed. Moreover, the teaching methods, resources, instructional forms and tools incorporated within the methodical system provide optimal conditions for developing 4th-grade primary school students' language abilities from a critical thinking perspective. The elective course holds particular significance for 4th-grade students, as it enhances their ability to apply higher-order thinking skills in language learning.

4 Conclusion

The proposed methodological system is designed to develop primary school students' language skills from a critical thinking perspective. This system comprises various components, including objectives, active learning tasks, teaching methods, technologies, forms, digital resources, content of the elective course, and expected outcomes. It represents an innovative approach aimed at preparing primary school students for the acquisition of 21st-century skills. These skills include readiness for effective communication, adherence to speech and cultural norms, the ability to reason competently, think critically, analyze information, make independent and informed decisions, and creatively develop project-based work.

An analysis of textbooks on Kazakh Language, Mathematics, Literary Reading, and Natural Science has revealed possibilities to cultivate primary school students' language skills from a critical thinking perspective. These possibilities extend beyond the planning and organization of the learning process, incorporating diverse methods, forms, and resources. They also include the design and implementation of the elective course "Language Skills," which focuses on enhancing students' language abilities through critical thinking.

In order to effectively implement the proposed elective course aimed at developing primary school students' language skills through critical thinking, it is essential to identify specific teacher training requirements as well as institutional challenges that may hinder successful implementation. In the context of Kazakhstan's general education schools, where curriculum reforms increasingly highlight competency-based and student-centered approaches, teachers should receive targeted professional development. This training should focus on incorporation of critical thinking strategies into language instruction, using interdisciplinary project-based learning, and employing formative assessment tools. Moreover, teachers should acquire skills to design and implement differentiated assignments that promote the development of listening, speaking, reading, and writing skills through cognitively engaging activities.

However, several potential obstacles need to be considered. These include a lack of time and resources for teacher training, limited access to quality teaching materials that support critical thinking, and a possible mismatch between standardized testing requirements and the more flexible, inquiry-based nature of the course. Institutional resistance to curriculum innovation, particularly in schools with rigid administrative structures or traditional teaching cultures, can also be a

challenge. Therefore, successful implementation depends not only on the readiness of individual teachers but also on systemic support, including policy alignment, institutional leadership, and sustainable professional development opportunities.

Nevertheless, moving forward, we plan to integrate this research into the primary education curriculum. To ensure continued application and improvement of the research outcomes, the following actions are proposed:

- Testing and evaluating the effectiveness and practicality of the proposed methodological system;
- Comparative evaluation of the proposed methodological system against traditional teaching methods for primary school students to determine its relative efficacy;
- Implementation and evaluation of the elective course "Language Skills" on a broader scale within schools, incorporating feedback from primary school teachers to refine and improve the course content;
- Dissemination of research findings through presentations at master-classes, workshops, seminars, conferences, and other professional development events;
- Continuous improvement of teaching methods, strategies, forms, resources, and tools used in the instruction of primary school students, ensuring alignment with evolving educational needs and standards.

In conclusion, a phased approach to these actions will contribute to the advancement of this research, enhancing the preparation programs for primary school students and improving the quality of teaching practices among school educators.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Author contributions

SA: Conceptualization, Methodology, Writing – original draft. KM: Conceptualization, Methodology, Project administration, Writing – review & editing. GO: Conceptualization, Writing – review & editing. AY: Methodology, Visualization, Writing – review & editing. AZ: Formal analysis, Investigation, Writing – review & editing.

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Supplementary material

The Supplementary material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/feduc.2025.1565783/full#supplementary-material

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