

DEVELOPING INTERACTIVE COMMUNICATION AND A CULTURE OF INDEPENDENT IDEA EXCHANGE AMONG PRIMARY SCHOOL STUDENTS IN A DIGITAL LEARNING ENVIRONMENT

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Abstract. This thesis examines the didactic and psychological foundations of fostering interactive communication and a culture of independent exchange of ideas among primary school students in a digital learning environment. The study integrates observation, pedagogical experimentation, content analysis, and diagnostic survey methods. As a scientific contribution, the research proposes an age-appropriate communication protocol and assessment criteria designed specifically for digital classroom interaction.

Keywords. Digital learning environment, interactive communication, independent thinking, culture of idea exchange, primary education, digital etiquette, collaborative learning, reflection.

Main Body of the Article. The rapid integration of digital learning environments into education has necessitated a reconsideration of communication and idea-exchange processes in primary education, both in terms of content and form. In a traditional classroom setting, student communication is predominantly oral, context-dependent, and readily regulated by the teacher. In contrast, communication within digital environments is multi-channel, taking place through written, audio, and video formats in both synchronous and asynchronous modes. This requires young learners not only to express their thoughts effectively but also to demonstrate complex communicative behaviors, such as waiting for their turn, staying on topic, supporting their opinions with evidence, listening attentively to others, adhering to discussion rules, and understanding the principles of digital etiquette. From this perspective, interactive communication and a culture of independent exchange of ideas should be viewed as an integrative educational outcome that extends beyond the technical skills associated with digital literacy, encompassing important educational, social, and psychological dimensions.

Communication serves as a leading channel of social experience in the psychological development of primary school students. Through communication, children develop their self-concept, learn to regulate their behavior, internalize social norms, and acquire the skills necessary for collaborative problem-solving. A digital environment can either enhance this developmental process or, conversely, reduce communication to superficial interactions characterized by brief responses and emotionally driven reactions. Therefore, the focus of the methodological approach should be on viewing interactivity not merely as a technological feature, but as a didactic mechanism that supports the development of students' thinking. While interactivity promotes active participation, it does not automatically guarantee the formation of a communication culture. Such a culture becomes sustainable through the establishment of rules, values, and reflective self-regulation. Consequently, fostering a culture of communication in a digital learning environment

requires carefully designed communicative tasks, clearly defined norms, and well-structured assessment criteria provided by the teacher.

In this thesis, the concept of “**interactive communication in a digital learning environment**” is defined as a purposeful, structured, and learning-oriented interaction between student–student and student–teacher participants through digital platforms, the outcomes of which are reflected in both reflection and assessment processes. The concept of a “**culture of independent idea exchange**”, in turn, is characterized by a student’s ability to express ideas meaningfully, support them with simple arguments, respectfully consider the opinions of others, maintain appropriate conduct during discussions, avoid personalizing disagreements, and adhere to the principles of digital etiquette.

In primary education, the criteria for assessing this culture should be simplified in accordance with students’ developmental characteristics and age-related needs. Practical indicators such as “*I can express my opinion,*” “*I can give a reason,*” “*I listen to others,*” “*I take turns when speaking or writing,*” “*I communicate politely,*” “*I stay on topic,*” and “*I correct my mistakes when necessary*” are clear, understandable, and developmentally appropriate for young learners.

As the methodological foundation of this study, the competency-based approach, activity-oriented learning, and social constructivist perspectives were integrated. The social constructivist framework is based on the idea that learners construct knowledge collaboratively through communication; therefore, it prioritizes collaborative tasks, question-and-answer activities, idea refinement, and reflection mechanisms within digital learning environments. The activity-oriented approach views communication not as casual conversation but as a purposeful learning activity, requiring each episode of digital interaction to be designed as a distinct didactic unit. The competency-based approach, in turn, argues that educational outcomes should be assessed not only in terms of knowledge acquisition but also through communicative and social skills, responsible behavior, and self-regulation. Based on these principles, a **digital communication protocol model** was developed for primary school students, incorporating participation rules, formats for expressing opinions, norms for asking questions, constructive discussion techniques, and stages for summarizing and reflecting on learning outcomes.

The empirical component of the research includes pedagogical observation, diagnostic surveys, and small-scale experimental activities. Through observation, common mistakes in students’ online communication—both in chat-based and audio interactions—were identified. These include posting messages simultaneously, deviating from the topic, limiting responses to brief “yes/no” answers, failing to justify opinions with reasons, displaying emotional tension during discussions, and neglecting basic principles of digital etiquette. Diagnostic surveys may reveal discrepancies between students’ self-assessments and teachers’ evaluations. Many students tend to believe that they actively express their ideas, whereas their ability to provide meaningful arguments and demonstrate attentive listening often remains underdeveloped.

During the experimental stage, learning tasks were redesigned through a structured communication framework. Mechanisms such as question prompts, the “opinion + reason” model, the “building on another person’s idea” technique, and small-group roles—including moderator, evidence provider, and summarizer—were integrated into the functionalities of digital platforms. These roles were not intended as rigid bureaucratic assignments; rather, they served as didactic tools that enabled students to practice different communicative functions in a rotational manner and gradually develop a broader range of interaction skills.

An important prerequisite for fostering a culture of independent idea exchange in digital learning environments is the concept of “**invisible guidance**” by the teacher. Within this framework, the teacher does not remain the sole authority controlling all communication. Instead, the teacher establishes norms, clearly defines communication tasks, provides model expressions, announces assessment criteria in advance, and gradually guides learners toward self-regulation. For example, before posting a response in a chat, students are encouraged to engage in a two-step internal planning process by asking themselves: “*What do I want to say?*” and “*Why do I think so?*” Developing this habit contributes not only to effective communication but also to broader academic competencies, including written expression, text construction, and logical reasoning.

Research conducted in both Russian and international educational contexts has demonstrated that reflective communication skills among young learners are most effectively developed through **scaffolding**, that is, the provision of gradual and structured support. In digital learning environments, such support can be delivered even more effectively through visual cues, concise instructions, communication templates, and assessment rubrics, all of which help students internalize productive communication practices and progressively become more independent participants in educational dialogue.

Assessment is one of the central aspects of this topic, as skills that are not assessed are unlikely to develop into stable habits. Therefore, this thesis proposes a criterion-based assessment model consisting of the following components: content relevance (the extent to which an idea is related to the topic), argumentation (providing at least one reason or example to support an opinion), adherence to communication norms (taking turns, using polite language, and expressing ideas clearly and concisely), listening and responding (building upon others’ ideas or asking questions rather than simply rejecting different viewpoints), digital etiquette (avoiding the excessive use of capital letters that may appear as “shouting,” minimizing unnecessary symbols, and refraining from sharing personal information), and reflection (the ability to recognize and correct one’s own mistakes).

These criteria are applied through a simple three-level rating scale and translated into language that is easily understandable for young learners. Importantly, assessment should be developmental rather than punitive. Its primary purpose is to help students identify which aspects of their communication skills require further improvement. In this context, collaboration with parents is also essential. Parents can support the reinforcement of digital communication norms at home through brief and practical guidance, while avoiding excessive monitoring that may place unnecessary pressure on children.

The component of digital safety and ethics is also interpreted as an integral part of a culture of independent idea exchange. Primary school students should be familiar with basic yet essential principles of responsible behavior in digital spaces, including respecting personal boundaries, acknowledging authorship, exercising caution when accessing unfamiliar links or files, and refraining from sharing photos or personal information without permission. These principles are most effective when naturally embedded within communication activities. For example, micro-rules such as “I will cite my source,” “I will acknowledge the owner of an image,” and “I will not share my friend’s phone number” can become integral elements of the communication protocol. In this way, communication culture in a digital environment extends beyond language etiquette and becomes closely connected to the responsible and ethical use of information.

Conclusion. The development of interactive communication and a culture of independent idea exchange among primary school students in a digital learning environment requires a

systematic and well-structured approach. Interactivity should be designed not merely as a technological feature but as a didactic mechanism that promotes the development of students' thinking. Communication rules should be simplified and presented in the form of a clear communication protocol, while each communication task should conclude with reflection and criterion-based assessment. The proposed assessment criteria and communication protocol model are tailored to the developmental characteristics of young learners and contribute to the formation of orderly written and oral communication, the development of basic argumentation skills, and the reinforcement of active listening and mutual respect. As a result, digital classroom communication becomes a practical space for the collaborative construction of knowledge, the responsible expression of ideas, and learning through social interaction and cooperation.

Adabiyotlar, References, Литературы:

1. Ishmuhamedov R. J., Abduqodirov A. A. Ta'limda interfaol metodlar: nazariya va amaliyot. Toshkent: Fan va texnologiya, 2019. 256 b.
2. Vygotskiy L. S. Myshleniye i rech. Moskva: AST, 2020. 640 s.
3. Polat E. S., Bukharkina M. Yu., Moiseyeva M. V., Petrov A. E. Novyye pedagogicheskiye i informatsionnyye tekhnologii v sisteme obrazovaniya. Moskva: Akademiya, 2018. 272 s.
4. Anderson T. The Theory and Practice of Online Learning. Edmonton: Athabasca University Press, 2016. 472 p.
5. G'afforova T. Boshlang'ich ta'limda o'quvchilarning kommunikativ kompetensiyasini rivojlantirish metodikasi. Samarqand: SamDU nashriyoti, 2021. 184 b.
6. UNESCO. Guidance for ICT in Education Policies and Masterplans. Paris: UNESCO Publishing, 2018. 142 p.