

On The Features of The Principles of Forming Interpersonal Communication Skills of Schoolchildren Based On 4K Skills

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Abstract:

Communication is a fundamental aspect of human life and essential for personal and social development. Among schoolchildren, the formation of interpersonal communication skills directly affects their integration and effectiveness in various life contexts. In modern educational settings, the 4K skills model—critical thinking, communication, collaboration, and creativity—serves as a framework for nurturing interpersonal skills aligned with 21st-century competencies. Despite its significance, the structured development of students' interpersonal communication skills through the 4K model remains underexplored, particularly in socio-psychological adaptation contexts. This study aims to substantiate pedagogical conditions and propose diagnostic tools that support the development of interpersonal communication skills based on the 4K principle among schoolchildren. The research introduces a pedagogical model that integrates the 4K principle into educational processes, outlining specific tasks such as semantic reading, verbal/non-verbal expression, social interaction, and value-based communication. It emphasizes the use of interactive methods, role-playing, and teamwork to build communicative competence. The study develops a diagnostic and methodological framework that combines socio-cultural, cognitive, and affective components of communication through the 4K model, adapting it to students' personal development trajectories. The findings offer an innovative strategy for schools to foster 21st-century interpersonal skills through systemic and practice-oriented pedagogy, contributing to more adaptive, collaborative, and confident learners.

Keywords: 4K Skills, Interpersonal Communication, Communicative Competence, Socio-Psychological Adaptation, Educational Pedagogy, Student Interaction, Personal Development, 21st-Century Skills.

Introduction

In the 21st century, interpersonal communication skills are essential for students to thrive in both academic and social environments[1]. Communication, being the cornerstone of human interaction, plays a decisive role in shaping identity, fostering relationships, and enabling effective participation in collective endeavors[2]. Within educational settings, the cultivation of such skills is crucial, especially when aligned with the globally recognized 4K model—communication, collaboration, critical thinking, and creativity—which forms the foundation for modern competencies. While formal communication is shaped by institutional norms and structured interactions, informal communication nurtures authenticity and emotional connection. For schoolchildren, navigating between these modes is not only a cognitive challenge but also a socio-cultural one[3]. As highlighted by various scholars and educators, including those in Uzbekistan, educational innovations must integrate theoretical and practical approaches that address the holistic development of learners—intellectually, socially, and emotionally. However, the dynamic nature of socio-cultural contexts demands adaptive, student-centered strategies for developing interpersonal communication competencies. This research investigates the pedagogical mechanisms that enhance students' communication capacities by embedding the 4K principles into everyday educational practice. It emphasizes culturally responsive teaching, the use of interactive and diagnostic tools, and the alignment of classroom activities with universal values. Furthermore, it identifies visual, behavioral, and linguistic cues as key elements in students' self-awareness and interaction patterns[4]. The study posits that targeted development of these skills not only improves socio-psychological adaptation but also fosters leadership, civic engagement, and lifelong learning habits among schoolchildren, preparing them for future academic and life challenges.

Methods

This study employed a qualitative methodology grounded in pedagogical and psychological principles to investigate the development of students' interpersonal communication skills based on the 4K model—critical thinking, communication, collaboration, and creativity[5]. The research framework focused on examining how structured pedagogical conditions and socio-cultural variables affect the formation of communicative competence among schoolchildren. Data collection relied on a synthesis of observational analysis, diagnostic evaluation, and interpretative methods to assess how students internalize and apply interpersonal communication principles within educational settings. Particular emphasis was placed on visual, verbal, and behavioral indicators of communicative behavior—such as eye contact, body language, expressive gestures, and verbal fluency—to capture the multidimensional nature of interpersonal interaction. The study also incorporated scenario modeling, role-play exercises, and collaborative group tasks designed to simulate real-life communication challenges and promote active engagement[6]. Evaluative tools were developed based on meta-subjective and meta-objective skills outlined in the 21st-century education framework, including diagnostic tasks assessing verbal and non-verbal fluency, semantic reading, and cognitive flexibility. Additionally, teaching sessions were structured to promote emotional expression, peer cooperation, and social inclusion through curated content and interactive technologies. The methodological approach sought to reflect the dynamic integration of personal identity development, cultural norms, and learning strategies, using both formative and summative assessment tools to evaluate progress. The outcomes were analyzed in the context of how 4K-based instruction cultivates communicative readiness, leadership capacity, and collaborative mindset in a diverse classroom environment, thereby aligning with national educational development goals[7].

Results and Discussion

Communication is the most important type of interaction between individuals, without which it is very difficult to imagine existence and personal growth. It is important in all aspects of human life. Depending on where the person communicates, two main types can be distinguished: formal and

informal. The main difference between the first is the presence of various relationships that limit a person in judgment and represent a certain framework that cannot be crossed.

Since communication penetrates into all aspects, fronts of our life and activity, communicative competence ensures successful life activities in society. Communicative competence adheres to the principles of tolerant behavior in interaction with the surrounding people, contributes to the group unity and cooperation of people in the field of professional activity, serves the manifestation forms of human individuality, the implementation of personal own capabilities, abilities and potential[8].

N. From Researchers. Muslimov, M. Usmanboeva, D. Sayfurov, Uzlidep faction A'in the Legislative Assembly of the Republic of Uzbekistan zosi. To 'raevlar' innovation education direction requires the development of theoretical knowledge, practical education and skills based on the acquisition of information of spirit, intelligence, physical strength, the theory of practical activity to go with knowledge, knowledge, loyalty, Communication Speech and Tashkent skills".

In the process of interpersonal mulacot skills of students, it is required to follow the norms and rules of the culture of communication. In connection with the contradictions of the chunk, the socio-cultural, personal-typological peculiarities of this society, universal relations, universal values, development, interpersonal mulacot also occurs in changes.

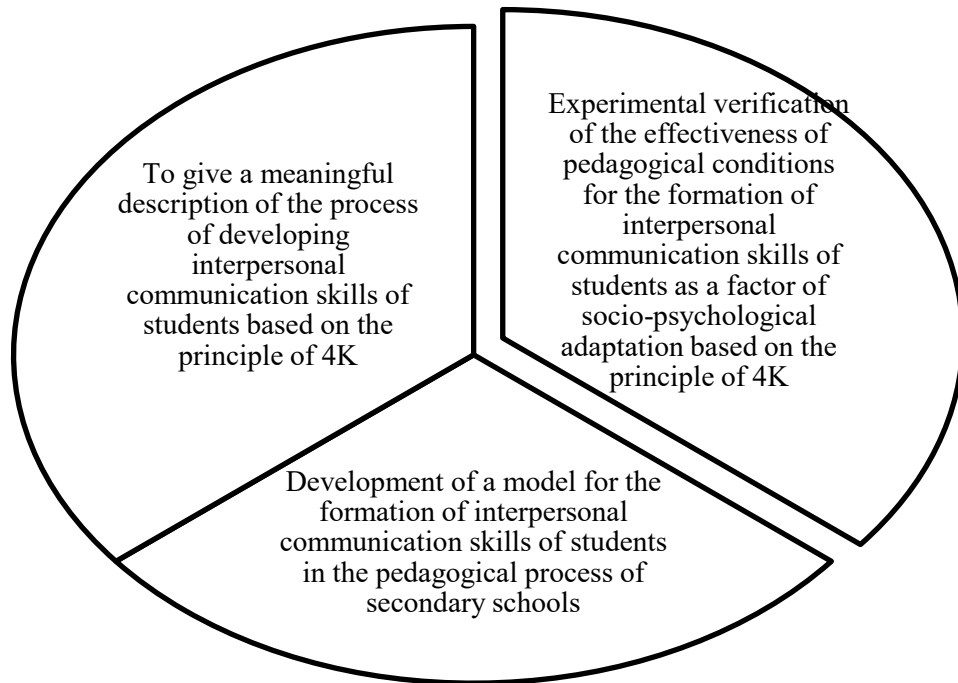
The study provides for the effective formation of the process of socio-psychological adaptation of the development of interpersonal communication skills of students on the basis of the 4K principle of students through the following set of pedagogical conditions: - the formation of interpersonal communication skills as a factor in the socio-psychological adaptation of adolescents is manifested as a pedagogical goal; -On the basis of the 4K principle, a model for the formation of interpersonal communication skills is developed in the process of socio-psychological adaptation of the development of interpersonal communication skills of students; - On the basis of the 4K principle, the scientifically based and implemented and pedagogical conditions for the development of interpersonal communication skills of students are justified; - the formation of interpersonal communication skills in the process of socio-psychological adaptation of students is ensured by the appropriate methodological support system; - On the basis of the principle of 4K, diagnostic tools are developed that provide control over the development of students in order to develop interpersonal communication skills [9]. In accordance with the problem, object, subject and purpose of the study, the following tasks were defined. (Figure 1)

Figure 1 visually represents the three central research tasks addressed in the study on enhancing students' interpersonal communication skills through the 4K framework (critical thinking, communication, collaboration, creativity):

1. **Top section** – Experimental verification: This segment outlines the task of empirically assessing the effectiveness of pedagogical conditions in shaping students' interpersonal communication skills, particularly as these skills relate to their socio-psychological adaptation within educational settings using the 4K approach.
2. **Bottom right section** – Model development: This area emphasizes the creation of a structured pedagogical model for integrating interpersonal communication skill development into the educational process of secondary schools, again guided by the 4K principle [10].
3. **Bottom left section** – Meaningful description: This segment focuses on providing a comprehensive and theoretically grounded description of the process by which students develop interpersonal communication skills through the 4K framework[11].

Together, the three parts of **Figure 1** reflect a systematic approach to research that integrates theoretical modeling, empirical testing, and descriptive analysis to address the formation of key 21st-century competencies in secondary education.

Figure 1: Key Research Tasks for Developing Interpersonal Communication Skills Based on the 4K Principle



To the "National visual text of communication" are first of all the expressive behavior of a person with changing components of the personality (Eye, Face, facial expressions, gesture, acquired attitude towards the interlocutor), second of all the physical (constitutionalist, individual character) sides of the person with the basics of visual diagnostics, third of all the social decoration of appearance (dress, hairstyle, accessories) are known to include functions (cognitive, affective and Regulatory) that are considered as the construction of a system of internal resources necessary for effective communication in certain situations of interaction in the development of interpersonal communication skills of students and the awareness of students in the following aspects of their personality: - own needs and value orientations; - understanding the norms and values of social groups and cultures; - the desire to communicate and work with peers together with them; - the ability to choose adequate methods of treatment and implement them in the process of interaction; - build and support personal qualities and necessary social contacts; - the desire to be accepted, recognized by peers when dealing[12]. (**Figure 2**)

The mechanisms by which students form interpersonal communication skills include:

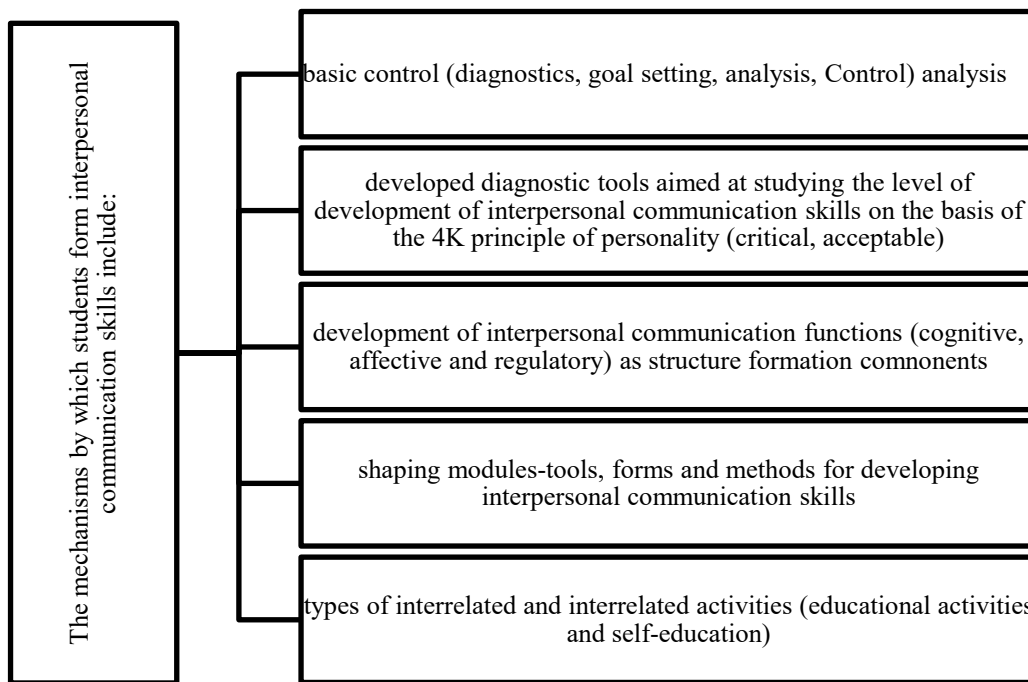
This flowchart-style diagram **Figure 2** outlines the interconnected pedagogical mechanisms that contribute to the development of students' interpersonal communication skills, particularly within the framework of the 4K competencies (critical thinking, communication, collaboration, creativity). The figure includes five key components:

1. Basic control functions – Encompasses diagnostics, goal setting, analytical processes, and performance control to guide communication skill development[13].
2. Diagnostic tools – Focuses on measuring the level of interpersonal communication skill acquisition based on the critical and socially acceptable components of the 4K model.
3. Function development – Refers to fostering communication functions such as cognitive (thinking), affective (emotional), and regulatory (behavioral) abilities as core structural elements.
4. Shaping tools and methods – Involves designing specific modules, teaching forms, and strategies targeted at cultivating interpersonal communication.

5. Interrelated activities – Integrates educational and self-directed learning activities that reinforce both mutual cooperation and individual advancement[14].

Together, these mechanisms present a systematic approach to fostering students' communication abilities. They emphasize the importance of structured assessment, skill-specific interventions, and a blend of personal and collaborative learning experiences—all aligned with modern educational objectives.

Figure 2: Mechanisms by Which Students Form Interpersonal Communication Skills



The development of interpersonal skills of students includes a set of pedagogical conditions that promote the development of cultures: - formation, cooperation and dialogue of motivational ustanovka for the development of culture of interpersonal mulagots; -filling lesson processes with valuable, personal-significant content for the student (methods for the formation of skills and skills of interpersonal interaction; introduction of topics that represent the practical application of interpersonal skills and skills); - the use of tools that promote the activation of students in interpersonal communication; - expression of friendly emotions and other cipsizing interpersonal conflicts: confidence, respect for students, high self-esteem and others; - involvement of students in creative activities, orientation towards the assimilation of universal values during it; modeling life situations, conducting role-playing and business Games; applying the method of analysis of specific situations, watching videos and listening to audiosours; analysis of the expression of the interpersonal skills of the heroes of the passage, arranging similar dialogues); - Organization of cooperation and dialogue in training; The main form of implementation of the pedagogical process is the team, and the technology of applying educational activities is interpreted in the interaction with the organization of collective creative activity[15].

In the student activities of 4K skills in modern researchers when applying universal skills in sheep formation cases of peeing condition available. They reflect the personal qualities of a person in his flock: how to communicate with their people; effective organization of the time of the hour; creative thinking; the ability to make decisions and take responsibility.

In our research work, we have set the requirements for the development and implementation of shahslaro communication skills on the basis of 21-ASG skills. (Table 1).

Table 1 presents a holistic educational model in which technical literacy, cognitive skills, and

emotional intelligence converge. It emphasizes that effective interpersonal communication is built not just on knowledge or ability, but also on character and adaptive behavior. This integrated framework provides clear guidance for curriculum development, teacher training, and student assessment in modern educational environments.

Table 1: Key Components for Developing Interpersonal Communication Skills Based on 21st-Century Competencies (21-ASG)

Basic types of literacy	21st century skills	Character qualities
language	Critical thinking	Interest
digital	creative	initiator
Natural-scientific ICT	communication	Tenacity
literacy	co-op	Flexibility
Educational	Interpersonal	Leadership
Nationwide	relationship	Social and cultural
Nationwide	Civic and cultural	awareness

On these goals, we have set the planned goals for the study. We divided these into two groups. Meta-subjective skills and meta-objective skills are considered. On the basis of the 4K model, issues related to the development of meta-objective skills for the development of interpersonal communication skills of students were prepared as follows. - plan students verbal and nonverbal ability in communication process based on 4K integer; - Development of communicative competence on the basis of 4K tamoyli, including the ability to communicate with them and the performance of various social roles; - Development of research training on the basis of 4K tamoyli, including the skills of working with them: - Search and selection of the necessary information of readers based on 4K tamoyli, generalization and fixation of information; - Development of semantic reading on the basis of 4K integer, including the ability to identify a topic, predict; - Title based on 4K tamoyli, understanding the content of the text with keywords, main idea, main emphasis; - Establishing a basic sequence of logical facts, leaving second-order facts based on the 4K integer; -Implementation of self-observation, self-control, self-control actions based on 4K tamoyli; - Focused on the evaluation of the process of interactional communication skills based on 4K tamoyli. The main goal of our research work is approached as follows: - formation of one's own desire and development of continuing education; - focuses on the development of educational and cognitive activities of students.

Conclusion

The development of interpersonal communication skills among schoolchildren, guided by the 4K framework (critical thinking, communication, collaboration, and creativity), plays a pivotal role in ensuring their successful adaptation within a socio-psychological and educational context. This research demonstrates that effective communication is not only foundational for personal expression and social engagement but also deeply embedded in pedagogical goals aimed at shaping socially competent, emotionally intelligent, and culturally aware individuals. The integration of the 4K model offers a structured pathway to develop verbal and non-verbal competencies, reinforce personal

values, and nurture cooperative learning. It enables students to interpret social cues, manage conflict, and establish meaningful relationships within a dynamic and diverse environment. Furthermore, the implementation of methods such as scenario modeling, interactive games, and critical reflection supports the cultivation of holistic communication skills. Emphasizing the importance of both visual and verbal aspects of expression, the study also highlights the role of cultural literacy and self-awareness in communication development. Overall, the findings affirm that fostering interpersonal skills based on the 4K principle equips students not only for academic success but also for responsible citizenship and adaptive behavior in a rapidly evolving world. This approach contributes significantly to the modernization of education and supports the creation of a more engaged, empathetic, and competent young generation.

References

- [1] J. Bellanca и R. Brandt, «21st Century Skills: Rethinking How Students Learn», *Solution Tree Press*, 2010.
- [2] C. Lehmann и Z. Chase, «Building School 2.0: How to Create the Schools We Need», *Jossey-Bass*, 2012.
- [3] H. H. Jacobs, «Curriculum 21: Essential Education for a Changing World», *ASCD*, 2010.
- [4] C. Andersson и M. Östman, «Developing Students' Interpersonal Skills Through Group Work: A Case Study in Education», *Teaching and Teacher Education*, cc. 34–42, 2016.
- [5] X. N. Nuritdinova, «Development of Students' Communicative Competence», PhD Thesis, Tashkent, 2023.
- [6] V. I. Marin и J. Negre, «Digital Competence in the Development of Interpersonal Skills in Higher Education», *RUSC. Universities and Knowledge Society Journal*, cc. 61–73, 2014.
- [7] J. W. Pellegrino и M. L. Hilton, «Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century», *National Academies Press*, 2012.
- [8] C. Fadel, M. Bialik, и B. Trilling, «Four-Dimensional Education: The Competencies Learners Need to Succeed», *Center for Curriculum Redesign*, 2015.
- [9] N. A. Muslimov, M. H. Usmonboeva, D. M. Sayfurov, и A. B. Turaev, *Innovative Educational Technologies*. Tashkent, 2015.
- [10] E. Silva, «Measuring Skills for the 21st Century», *Education Sector Reports*, 2009.
- [11] Women Community, «New Message!» 2023 г.
- [12] C. L. Scott и M. Fullan, «New Pedagogies for Deep Learning: A Global Partnership», *Education Plus Development*, 2015.
- [13] G. Bekimbetova, «Practical Importance of Developing 4K Skills in Karakalpak Language Lessons», *International Journal of Recently*, cc. 186–190, 2023.
- [14] F. S. Soliyev, «Psychological Basis for Measuring the Effectiveness of Visual Diagnostic Criteria in Interpersonal Relations», PhD Thesis, Tashkent, 2023.
- [15] S. Cassidy, «Self-Regulated Learning in Higher Education: Identifying Key Components and Processes», *Studies in Higher Education*, cc. 989–1000, 2011.