

Development of Cognitive Competence of Computer Science Teachers

**Mardonkulov Jasur Amirddinovich,
Norbekov Doston Keldibekovich,**

Jizzakh regional center for retraining and advanced training of public educators, department of "Methodology of exact and natural sciences"

Annotation

Human society is unthinkable outside of communication. Communication is a necessary condition for the existence of people, without which it is impossible to fully form not only individual mental functions, processes and properties of a person, but also the personality as a whole. The reality and necessity of communication is determined by joint activity: in order to live, people are forced to interact. Always an active person communicates, whose activities intersect with the activities of other people. Communication allows you to organize social activities and enrich it with new connections and relationships between people.

Key words: ICT, competence, communication, necessary condition, mental functions.

Introduction

A person communicates with other people from the moment of birth, but sometimes people who are distinguished by high achievements in the study of the phenomena of the material world turn out to be helpless in the field of interpersonal relations, therefore a person must study the rules of interaction with people in order to become a socially full member of society. In other words, communication will be effective only when the people interacting with each other are competent in the given situation.

Currently, in education, the competence-based approach is proclaimed as one of the important conceptual provisions of the renewal of the content of education. Referring to the world educational practice, the authors of the modernization strategy argue that the concept of "key competencies" acts as a central, kind of "nodal" concept, since it has an integrative nature, unites knowledge, skills and intellectual components of education. At the same time, it is emphasized that the concept of the competence-based approach is based on the ideology of interpreting the content of education, which is formed "from the result" ("standard at the end"). The purpose of the competence-based approach is to ensure the quality of education.

Literary review

In the most general terms, competence in communication, according to E.F. Zeer, presupposes the development of an adequate orientation of a person in himself - his own psychological potential, the potential of a partner, in a situation and a task. In the context of continuous education, the task of training a competent person is being solved, who must adequately orientate himself in all spheres of social life and actively influence them, without which the transition to an educational society with a high level of spiritual, legal and professional culture is impossible.

The problem of the formation of students' cognitive competence is reflected in many social, psychological, linguistic studies from different points of view.

Sociologists and psychologists (A.A. Bodalev, A.B. Dobrovich, E.Ya. Maliburda, L.A. Petrovskaya, E.V. Rudensky, etc.) associate it with the development of skills to give a socio-psychological forecast of a communication situation, to program this process, getting used to the atmosphere of a communicative situation and to manage the process of communication of a group, collective, team.

In pedagogy and psychology, the definition and composition of these units of vocational education renewal are contained in the works of V.I. Baidenko, I.A. Winter, G.I. Ibragimova, V.A. Kalnei, A.M. Novikova, M.V. Pozharskaya, S.E. Shishova, A.V. Khutorsky, etc.

The competence-based approach is clearly indicated in the works of Russian psychologists V.V. Davydova, P. Ya. Galperin, V.D. Shadrikova, P.M. Erdnieva,

I.S. Yakimanskaya. The orientation towards mastering generalized knowledge, skills and methods of activity

was the leading one in their work. At the same time, it should be noted that in their developing models of learning, the content of educational materials and technologies for the formation of these generalized units of learning were also presented. Summarizing the research on this issue, I.A. Zimnaya has identified three stages in the development of the competence-based approach.

The first stage (1960–1970) is characterized by the introduction of the category “competence” into the scientific apparatus, the creation of prerequisites for differentiating the concepts of competence / competence. The second stage (1970–1990) is characterized by the use of categories of competence / competence in the theory and practice of teaching mainly the mother tongue, as well as in the field of management and management.

The third stage since 1990 of the approval of the competence-based approach is characterized by the active use of the category of competence / competence in education.

A.V. Khutorskoy notes that the introduction of the concept of "competence" into the practice of teaching will solve a problem typical for a Russian school. Having mastered a set of theoretical knowledge, students experience significant difficulties in their implementation when solving specific problems or problem situations. Educational competence presupposes not the assimilation of individual knowledge and skills by students, but their mastery of a complex procedure, in which a corresponding set of educational components is determined for each selected area. The peculiarity of the pedagogical goals for the development of competencies is that they are formed not in the form of the teacher's actions, but in terms of the results of the student's activity, that is, his promotion and development in the process of assimilating a certain social experience.

Currently, a second-generation standard is being developed, in which the formation of competence/competence is brought to the level of an education standard.

The most important task of ensuring the general education of students is their general development, improvement of linguistic and cognitive competence, achievement of such a level of language proficiency, which is sufficient for the active and fruitful participation of the future specialist in professional activities.

The formation of cognitive competence is the goal of training schoolchildren for any professional industry, which, in the context of the modernization of domestic education, modern science and production, acquires special significance. But most of all, this is a problem associated with the implementation of speech activity, as the implementation of communicative behavior based on a system of components: motivational (speech behavior), cognitive (knowledge), operational (overcoming the contradictions prescribed by the content of learning).

Thus, the formation of the cognitive competence of students is an urgent problem, the solution of which is of great importance, both for each individual person and for society as a whole, and both teachers of all academic subjects and ICT should pay attention to its solution.

Method

The universal educational actions of the new standard will contribute not to the accumulation of knowledge, skills, competencies, but to the development of the personality (its cognitive and emotional spheres, morality). This is the ability to learn, to learn about the world, the ability to cooperate, to be tolerant of people of different races and nationalities. In other words, the universal learning actions, developed within the framework of the new standards, constitute specific generalized actions that underlie the general abilities of a person.

For example, one of the types of such actions is an action with self-regulation of cognitive and creative activity (situation analysis, goal-setting, planning means to achieve a goal, control, correction, evaluation of the achievement of results). Today, the ability for such actions in school is being formed, but it happens spontaneously, inadvertently, it becomes an indirect (additional) result of learning. It would be more productive to make the formation of such a universal learning action the main task of the school. Thanks to the formation of a general ability for self-regulation and regulation, it is possible to ensure the solution of priority tasks: to teach to know the world, to teach to learn, to cooperate, to communicate, to organize joint activities, that is, to form competence.

Result

ICT has tremendous opportunities for the development of thinking and logically perfect speech. To reason, to prove a theorem, or to solve a problem on your own, you need not just memorize the material, but think on

your own. A student, not understanding the idea of proof, will certainly make some inaccuracy when answering; for the correct answer, he must understand the system of reasoning, the thought that lies at their basis. The student should show in his answer not so much the skill of memorization as the skill of reasoning. In ICT speech, there should be no words that do not carry a semantic load. Superfluous words and sentences can be said to provide an emotional impact on the interlocutor, to clarify connections with practical problems or with other scientific disciplines.

To learn how to apply individual knowledge, you need to develop your speech. And for this it is necessary: Determine your own line of natural speech communication and adhere to it as a standard (complete clarity; scientific nature (exact use of terms, accuracy of formulations, definitions and sentences, logical validity of reasoning); adherence to the rules of etymology and syntax (correct use of cases, agreement, use of conjunctions, reduction of sentences); literary (approximation to the literary style, liveliness, imagery of presentation).

Pay special attention to ICT phraseology and persistently enrich the student's scientific style of speech with it.

Ensure that students correctly use ICT terms denoting concepts (the study should include: origin, literal meaning, scientific meaning, illustrations and examples are provided). Insufficiently deep, superficial assimilation of the concept

is the reason for its misuse by students; an unclear, incomplete understanding of the term immediately entails inaccurate, vague, vague speech.

To draw the attention of students to the expressions and wording of the textbook, to explain what is essential, defining (not mentioning can reduce these formulations to the level of meaningless sentences).

Subordinate the student's speech to those general laws that the students studied in the Russian language lessons.

Use written language to develop the language. Recognize stylistic, spelling, and especially punctuation errors and make them the subject of active class discussion. These discussions will remind students each time that deficiencies in written work include not only ICT errors, but also stylistic, spelling and punctuation deficiencies in their writing.

Of particular importance is the compilation of explanations by students to the solutions of word problems. They should be written in a completely literate and, moreover, certainly coherent language. Speech errors in ICT expressions, made in the early period of study, take root if the deficiencies in speech are ignored, on the basis that students understand what is at stake and simply make a reservation.

Conclusion

Thus, for the formation of cognitive competence in students, not only knowledge, skills and abilities are needed, but also motivation for their development and the significance of the new material.

Cognitive competence as knowledge of the norms and rules of communication, mastery of its technology, is an integral part of the broader concept of "the communicative potential of a person."

Communicative potential is a characteristic of a person's capabilities, which determine the quality of his communication. It includes, along with competence in communication, two more components: the communicative properties of a person, which characterize the development of the need for communication, attitude to the

way of communication and communication skills - the ability to take initiative in communication, the ability to be active, to emotionally respond to the state of communication partners, to formulate and to realize their own individual communication program, the ability to self-stimulation and to mutual stimulation in communication.

Communication experience occupies a special place in the structure of a person's cognitive competence. On the one hand, it is social and includes internalized norms and values of culture, on the other hand, it is individual, since it is based on individual communicative abilities and psychological events associated with communication in the life of an individual. The dynamic aspect of this experience is the processes of socialization and individualization, implemented in communication, ensuring the social development of a person, as well as the adequacy of his reactions to the situation of communication and their originality.

Communication can have different content, which is expressed in the following:

Transfer of information from person to person.

Perception of partners in communication of each other.

Mutual assessment of communication partners of each other.

Mutual influence of communication partners on each other.

Interaction of partners with each other.

Management of group or mass activities and so on.

The realization by a person of his subjectivity in communication is associated with the presence of the necessary level of cognitive competence.

That is, cognitive competence has distinguished features. It includes knowledge, skills and abilities, including: communication functions and features of the communicative process; types of communication and its main characteristics; means of communication: verbal and non-verbal. And one of the main means of communication is speech.

The ability to think logically, to reason correctly is a prerequisite for a deep and conscious assimilation of ICT.

Through stubborn persistent and, most importantly, daily work, the teacher develops exactly that speech that will be perceived by students as a certain model.

The qualities that determine oral ICT speech should be:

complete clarity of the thoughts expressed by her;

scientific nature (exact use of terms, accuracy of formulations, definitions and sentences, logical validity of reasoning);

observance of the rules of etymology of syntax, correct use of cases, use of conjunctions, reduction of sentences;

literary (approximation to the literary style, liveliness and imagery of presentation).

Such vices as the use of parasitic words must be eliminated in every possible way.

The main general point of the educational function of ICT education is to accustom students to the usefulness of argumentation.

Studying ICT, a student for the first time in his life meets such a high demand for the full value of argumentation. At first, she surprises, repels, frightens him, it seems to him excessive, overdimensional, pedantic. But gradually, day after day, he gets used to it. A good teacher can do a lot to make this process faster and more productive. It is very important to develop mutual criticism among students; when one of them proves something or solves a problem in front of the whole class, all the others should intensely look for possible objections and immediately express them. This educational process is critical for the logical culture of thinking and cognitive competence in students.

Also, a very effective means for developing the language of students is the development of their correct written speech. However, correction of errors will only be effective for raising the culture of students' written language when the teacher systematically summarizes all the fundamental mistakes made in written works and makes them the object of active discussion in the class.

The shortcomings of written works include not only ICT errors, but also all stylistic, spelling, and punctuation shortcomings of their written speech. It is especially important for students to compose explanations for solving word problems. These explanations should be written in a competent and coherent language, and not in the form of fragmentary, abbreviated sentences that are very incomprehensible and not accurately expressing the idea.

The main mistakes encountered in writing.

Incorrect use and misrepresentation of terms;

Stylistic mistakes and shortcomings.

Cognitive competence was also considered as one of the key competencies. It was found that for the formation of cognitive competence in students, it is necessary to develop communication skills and form communication skills. It was also revealed that one of the leading indicators of the level of formation of cognitive competence is speech. Further, ICT speech and the levels of formation of communicative actions in its forms: oral speech and written are considered.

Reference

- a. Akramov MR Psychological and pedagogical features of environmental education // The Way of Science. - 2014. -- S. 78.
- b. Akramov M. R. et al. Shahs kasby yʻnalganligi rivozhlanishida masuliyatlilikning aʻamiyati // Young scientist. - 2021. - No. 11. - S. 259- 261.
- c. Akramov MR Conflict and its social and psychological properties // Young scientist. - 2021. - No. 6. - S. 293-295.
- d. Akramov MR ECOLOGICAL CONSCIOUSNESS AS A SUBJECT OF PSYCHOLOGICAL RESEARCH // Scientific platform: discussion and polemics. - 2020. - S. 30-32.
2. Rustamovich A. M. The moral consciousness dynamics of students is the position in the process of high education //European journal of education and applied psychology. – 2016. – №. 1.
3. Arkamov M. R. THE ETHICAL AWARENESS BEHAVIOR OF STUDENTS DURING HIGHER EDUCATION (IN THE CONDITION OF UZBEKISTAN) //European Journal of Research and Reflection in Educational Sciences Vol. – 2016. – T. 4. – №. 10.
4. Akramov MR PROBLEMS OF STUDYING PSYCHOLOGICAL FEATURES OF DEVELOPMENT OF ECOLOGICAL CONSCIOUSNESS ACCORDING TO VA YASVIN // SCIENCE AND WORLD. - 2013. - P. 117.
5. Antonova N.V.
6. Problema lichnostnoy identichnosti v interpretatsii sovremennogo psixoanaliza, interaksionizma i kognitivnoy psixologii // Voprosi psixologii.