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Research Competence and its Characteristics

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Abstract: This article is about the issue considered relevant nowadays, that is to say, the pedagogical-psychological features of the formation of research competences in high school students, the formation of students' skills to find the explanation of each word.

Keywords: Research competence, intellectual development, concepts of competence and competence, research activity, problem situation, methods of scientific knowledge.

Research competence is the knowledge, skills, competence to conduct research on problems, to direct the ownership of lives from the early age, to create intellectual educational products, to work on non-traditional projects, to show standard solutions to unfamiliar situations and to represent the totality of the experience. The work is the problem of the formation of the research competence of students – a painstaking process, directed through the achievement of the goal. In this process, it is necessary to ensure the mutual coordination and concentration of students, teachers, educational institutions and parents.

Research competence is the ability of learners to independently acquire new knowledge, strive for mastery of their content, readiness for this process; work with various literaturetheme; putting forward ideas and assumptions as a result of observations, conducting experiments; in-depth study of the problem: highlighting, proposing solutions; includes optimal and justified options for the realization of intellectual projects. Research competence is formed with the help of various forms and tools. It is important to note that, as one of the most effective approaches, the chosen ones for the purpose of our research, the effective ones are the creation of a "Student Scientific Community" in educational studies and activities on this basis. Therefore, in order to have a general educational school, a center for scientific research work, it is necessary to plan a wide range of preparatory work, create a variety of activities, define mechanisms for realisation, establish schools and families in this cooperation. Of course, it is assumed that the process will include the memory of the teacher, students and parents. Research competence is the ability of learners to independently acquire new knowledge, strive for mastery of their content, readiness for this process; work with various literaturetheme; putting forward ideas and assumptions as a result of observations, conducting experiments; in-depth study of the problem: highlighting, proposing solutions; includes optimal and justified options for the realization of intellectual projects.Research competence is formed with the help of various forms and tools. It is important to note that, as one of the most effective approaches, the chosen ones for the purpose of our research, the effective ones are the creation of a "Student Scientific Community" in educational studies and activities on this basis. Therefore, in order to have a general educational school, a center for scientific research work, it is necessary to plan a wide range of preparatory work, create a variety of activities, define mechanisms for realisation, establish



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The society is a voluntary public association based on the project activities of high school students, teachers, teachers of other subjects, specialists of partner universities, scientific research centers involved in the organization of scientific research work in general education schools.

The purpose of the society is to:

- 1) the development of the needs, interests and abilities of students;
- 2) motivation of scientific and creative activity in the framework of cognitive processes;
- 3) familiarization with the methods of research, scientific terms and sources of information, the theory of working with didactic materials and the subject;
- 4) design, presentation, defense, discussion of the results of the study.

Proceeding from the above, it is advisable to include in the components of the research competence of the students:

- A) self-education of students;
- B) professional self-determination.

In our view, in the era of globalization, which is developing with extreme trends, modern man does not need to regularly demonstrate his research activity. Consequently, if a child has not acquired the ability to work with various information in school, is not accustomed to independent and logical thinking, does not have the ability to express and express proposals for solving problems, justify and defend his views, then the condition is right to say that the minimum qualification requirements specified in the national standard are not met. So, the student's self-education in the composition of the base competence gives an impetus to the development of his general research ability. Every young man who wants to witness his future in various fields of science has the opportunity to start his first professional career as a qualified scientific worker with a school card. For a long time now, there has been a doubt that research capacity is needed in the main circle of specialists working in various areas of science, in universities or scientific research institutes. But in the present, there are changes in the thinking of the members of the community, based on the economy and the demands of the market, there are also some changes in these views.

There was no need to start the process with the separation of the components. For example:

- 1) knowledge;
- 2) ability;
- 3) kakopyt.

The level of development of research competence of students requires the use of a number of methods, in particular monitoring, to determine their scientific literacy and aptitude for research activities.

The levels of formation of the research competence are determined by the outcome of the investigation:

- a) close observation of the studied object and its characteristics;
- b) ask a question about the problem;
- c) checking the students for this question;
- d) identification with accounting of work, intended for communication, educational and research activities, scientific events organized at the school and extracurricular levels, etc.



Monitoring is carried out by students of natural sciences, social scientists, school psychologists and classroom teachers. The results will be analyzed together, there will be scientific achievements and shortcomings, and they can be evaluated by the following levels:

Level 1. High – triballa.

Level 2. Enough is enough – dvaballa.

Level 3. Low – 1 point.

It turns out that the lower level creates the need for maximum cooperation between the teacher and the student. The key research competencies of students include:

- 1. Fundamentals of Science: terminology, basic laws.
- 2. Main terms: the relevance of the studied problem, goals and objectives of the study, object, subject, hypothesis, methods, practical significance, etc.
- 3. The main research directions of science at the school level.
- 4. Stages of research activity.
- 5. Presentation of results.
- 6. Evaluation criteria.
- 7. Scientific ethics of a young researcher.
- 8. Solving the problem.

The primary research studies of school students are determined in the following order:

- \checkmark We begin to formulate the following;
- \checkmark Setting the appropriate goals and objectives in the framework of the problem;
- ✓ Composing a hypothesis and a plan for confirmation or refutation;
- ✓ Selection of important sources;
- ✓ Development of ideas, solutions of problems, variants of projects;
- ✓ Forecasting, comparison, generalization and conclusion about the causes of events and processes;
- \checkmark Connection of the achieved results with the set goals and objectives;
- ✓ Determination and processing of results;
- ✓ Trainingconstruction of a list of Used literature;
- ✓ Knowledge and understanding of the main terms related to the ongoing research work, etc.

In general, speaking about new situations in education, it is appropriate to discuss the following thoughts of K. N. Polivanov's research competencies: "These competencies are based on the academic subjects of the secondary school, but in a different form than the traditional course, in particular, is formed in research and project activities. The school can create conditions for the development of such abilities. Comprehensive development of the school system contributes to the change of the school system.

From the above, it is clear that the student can independently select and study the literature and Internet resources of the subject based on the general recommendations of the publisher, compile a list of recommended literature, identify reliable and unreliable sources, analyze the results of the referral and evaluation are considered important.

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