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Дидактичні аспекти проблем контролю знань студентів.

Дидактические аспекты проблем контроля знаний студентов.

Dedactic aspects of the problems students' knowledge control.

**Анотація.** У даній статті мова йде про педагогічні аспекти контролю знань студентів, розкривається роль і сутність контролю знань, основні принципи, підкреслюється роль систематичності контролю. Систематичний контроль знань і умінь учнів – одна з основних умов підвищення якості навчання

**Аннотация.** В статье рассматриваются педагогические аспекты контроля знаний студентов, раскрывается его смысл и роль, подчеркивается значение его систематичности. Систематический контроль – одна из составляющих повышения качества обучения.

**Abstract.** This article is about the pedagogical aspects of the problems of students' knowledge control. The essence of pedagogical aspects has been analyzed as a prerequisite of the effectiveness of the educational process.

**Ключові слова:** контроль знань студентів, процес навчання, функції і принципи контролю знань студентів, покращення якості контролю знань студентів.

**Ключевые слова:** контроль знаний студентов, процесс обучения, функции и принципы контроля знаний студентов, систематический контроль, улучшения качества обучения.

**Key words:** students' knowledge control, learning process, assessment, functions and principles of students' knowledge control, systematic control, improving the quality of education.

Students' knowledge control is an integral part of the learning process. By definition, control is the ratio of achieved results to the planned learning objectives. Testing students' knowledge should provide information not only about the correctness or the wrongness of the final result of the activity, but also about it itself: whether the form of action corresponds to this stage of

assimilation. Correctly done control of educational activities allows the teachers to evaluate knowledge, skills, provide timely the necessary assistance and achieve the goals of education. All this in aggregate forms creates favorable conditions for the development of cognitive abilities of students and activation of their independent work at the lessons. A well-placed control allows not only to assess correctly the level of students' learning of the material being studied, but also to see their own success and failures.

The analysis of pedagogical and methodological works (E.I.Petrovsky, M.O.Arkhangel'sky, G.I.Kazmin, T.S.Panfilov,) indicates that the term "verification of pupils' knowledge" is identified or replaced by the term "knowledge control". At the same time, checking is a structural element of control. The contents of the concept of knowledge control is properly revealed by M.O.Sorokin, indicating that control means verification. The control, verification and evaluation of learning outcomes are components of the educational process, without which it is impossible to imagine the pedagogical interaction between the student and the teacher.

If control and verification are built correctly, they help to identify timely the gaps in knowledge and skills of students, to repeat and systematize the material, to establish the level of readiness for the acquisition of new material, the formation of the ability to use methods of self-examination and self-control.

Let's consider the functions of controlling and verifying knowledge, skills and abilities of students. It should be noted that the results of control are the basis for evaluating students' achievements, that characterize the level of knowledge mastering, skills and abilities of students in accordance with the requirements of the curriculum. The notion of "knowledge control" is much broader than the concept of "verification". This concept is generic in relation to such concepts as "knowledge testing", "assessment of knowledge", "results of educational achievements".

Testing of knowledge is used in the narrow sense as a methodological method in connection with the evaluation of the results of a task, it has more educational functions.

The control of knowledge, as a rule, is aimed at revealing the level of material assimilation already studied by students, is carried out mostly by a teacher.

An assessment of students' knowledge means the relation between what the student knows, and what he should know at the moment of study. Score is often fixed using a measurement (scores). Results of evaluation of educational achievements (assessment of the system of evaluation) - marking points.

The role and essence of students' knowledge control are stated in many pedagogical works. The ideas of control, in particular, are based on the writings of Y.A.Komensky, A.V.Dirsterga, N.I.Pirogova, K.D.Ushinsky and others.

Teacher Y.A. Komensky, the founder of school education, in his book "Great Didactics" formulated didactic requirements for learning, gave instructions on how to plan a lesson. In particular, he pointed out the part of the lesson that should be taken to poll students, put forward the results of evaluating the achievements of students.

The German teacher A.V.Disterveg paid great attention to the mastering of the studied material. One of the indicators of such an assimilation is the ability of students to redefine clearly the essence of the case. He put forward a rule for the teacher: "Take care so that the students should not forget what they learned" and recommends returning to the learned material more often. Consequently, ideas of systematic control over the results of students' education are put forward.

The well-known teacher M.I.Pirogov had the same opinion. He suggested that the transfer from class to class should be carried out on the results of final control, negatively related to the examinations, noticing the elements of chance and formalism.

Constructive ideas of knowledge control of students are expressed by K.D.Ushynsky. If there are gaps in the students' knowledge, this is largely due to improper teaching, the inappropriate use of teaching methods, the system of

tasks, the inability of the teachers to notice timely their mistakes and mistakes of the children. He believed that if the main goal is only to check knowledge formally, or simply to put a mark, then such a test is a waste of time. He advocated for timely control, for such methods of checking the knowledge of students that would activate the entire class. Ushinsky clearly highlights the ideas of thematic control, but substantiates the basic requirements for the verification and assessment of students' knowledge that has been realized and in our time.

The principles of student knowledge control have been worked out more detailed recently. The basic principles of student knowledge control - objectivity, systematicity and timeliness, purposefulness, thematicity. The principle of objectivity and systematicity is considered in the works of E.I.Perovsky.

Objectivity is the correct definition of knowledge, skills and abilities of students and assessment of this knowledge. Only an objective assessment gives students deep moral satisfaction and is an effective incentive in learning, has a great educational value.

Systematicity, as the principle of control, is the regular identification of knowledge, skills and abilities, organically combined, with the learning process and influencing its course (under the timeliness of control we understand the uniformity and its defined frequency within the limits of a separate lesson and the whole theme).

Purpose determines a definite approach to the selection of material to be tested, in accordance with the choice of forms and methods of verification and evaluation of knowledge, learning outcomes, taking into account the individual characteristics of students.

The principle of subject-matter control is provided by checking the knowledge of the basic concepts of each topic that should be deeper assimilated by the students. The student assimilates not a continuous flow, but certain doses, which should be comprehended after active perception, and then systematized in his memory. The quality of memory depends on a certain amount of repetition of the learned material and its practical application, only after these psychological actions the

student can check the quality of understanding and memorization, go to the study of the next dose.

The gradual formation of knowledge and the gradual examination of their quality create the proper conditions for the selection of the most essential in the educational material, free from the learning of superfluous information. It is not necessary to identify the principle of contents with the timeliness (regularity) of verification. If the former contributes to concentrating on clearly defined program questions, at specific doses of the training material, then the other is tied to a uniform test in time. During thematic control, the necessary uniformity and sufficient frequency of verification are carried out.

Consequently, the principle of thematic, aimed at the discovery, evaluation and outcome of educational achievements of students on the identified significant issues of the topic, the establishment of links between the themes, as well as interpersonal relations. Its components are: control, verification, evaluation and outcome of student achievements.

An integral part of the control is the identification of the level of knowledge, skills and abilities of the student at this stage of training. Knowledge testing should provide training. Able use of it provides the necessary information for the teacher to guide the learning process. Testing students' knowledge carries certain didactic functions.

It would be wrong to consider the functions of checking pupils' knowledge isolated from each other. Only in close interconnection of all functions of checking positive results in the study are provided.

The functions of verification are considered in many works on pedagogy and in various methods, sponsored by: Ye.I.Perovsky, N.G.Dairy, G.I.Kazmin, M.O.Arkhangel'sky, D.O.Lordkipanidze, T.S. Panfilov, MM Pokrovsky, N.E. Ankudinov, M.T.Kalinchuk, M.V.Poha and others.

Didactic studies of M. A. Arkhangel'skii, D. Dolordpanipanidze, V.O.Onishchuk, A.Orlova, T.S.Panfilov, B.P.Roitman show that verification of students' knowledge is necessary not only for the management of mastering and repetition

of the material, but it has a great educational value. This disciplines the students, educates them in their responsibility for the work, teaching them to work systematically, asking for a desire to compete for the best indicators of learning outcomes.

E.I.Perovsky classifies general and specific functions of verification. The first is the identification of the level of knowledge of students, on the basis of which conclusions are drawn about the results of their work. The second one is the education of students in the responsibility for their education, conscious execution of educational tasks.

Due to proper checking, students' knowledge changes: it becomes more precise, fuller, stronger, more meaningful.

M.G.Dairy defines the following functions for verifying knowledge of students: assessment and effectiveness of knowledge, improving their knowledge in the process of verification, development of their cognitive abilities and language, education of positive personality traits.

The examination helps the teacher to determine how memory, the way of thinking of students have been advanced, how each owns oral speech, which learns easier, and which is harder. It forms an organic part of the results of student achievements, as a means of organizing the process of assimilation.

Depending on when the check is being performed, V.O.Onyshchuk defines the following basic verification functions: educational, corrective, control-generalizing. The review, which provides control-stimulating function, the author calls a thematic evaluation of knowledge. As a result, two different concepts of "verification" and "learning outcomes" are identified.

The research shows that it is necessary to allocate the following control functions: diagnostic, educational, developing, stimulating. Classifying these functions of control and evaluation of the results of learning achievements of students, we proceed from the fact that: 1) verification of knowledge enables the teacher to determine the actual level of knowledge of students and thus control the effectiveness of teaching methods and techniques; 2) verification of

knowledge is an integral part of the learning process. Consequently, it provides educational and educational goals; 3) substantiation of the teacher's answers during the verification of knowledge reveals the student specific opportunities to enhance the results of their academic achievements.

In our opinion, the diagnostic function of checking the academic achievements of the students is that, through a certain system of tasks, the teacher determines the possibilities for further advancement of each student. It includes the fact that the teacher diagnoses the effectiveness of the methods and techniques used by him.

The educational function is directed at the development of such tasks for the student, which promote generalization, deepening and systematization of knowledge, the development of logical thinking of students in learning. M.N.Pokrovskaya emphasizes that the examination can be made so that it does not appear to be time wasted, but a continuation of the learning process, its special form. When correctly verifying students' knowledge, the teacher works with a whole class, and even every student is interviewed as an opportunity to continue working with the whole class. The check is used for repetition, refinement of knowledge, preparation of students for the perception of new material. In almost all classes, pupils' knowledge testing can be arranged so that it performs a learning function.

The educational function of monitoring and checking the assessment of the results of student achievements should also be carried out when performing written assignments.

It shouldn't be considered normally for a situation where the goal is not always a means of learning and systematization of knowledge, emphasizes M.L.Kreizman. It is necessary that students who completely or partially failed to complete the tasks identified a mistake and should be able to explain it. In practice, however, we often encounter the fact that teachers do different kinds of written work for the sole purpose of placing a ball. Errors while not analyzing, do not carry out additional work to eliminate them. Sometimes, students do not even know what

they have been given a score for. Thus, the accumulation of errors leads to the fact that the training becomes boring, uninteresting.

Educational function of control and verification is revealed in the method of conducting a teacher, in the next comment and evaluation of works. Essential importance for the implementation of the educational function of verification is to direct it to the development of intellectual abilities.

The developmental function is also closely related to other control functions. Recently, it began to attract close attention of psychologists, didactics researchers, methodologists and teachers. In the literature the idea is repeatedly argued that mental development of students is provided by special methods-problem, search, research. But most psychologists and didactics researchers consider that developmental function is used in all kinds of control (preliminary, current, thematic, final).

The control function involves establishing the level of educational achievements of individual students and the class as a whole; it gives the teacher the opportunity to judge the quality of assimilation of the subject, schedule corrective work and methodology for the study of the next material in a timely manner.

Psychologist B.G. Ananiev highlighted the orientation and stimulating function. Orienteering influences mental work, promotes understanding of the process of this work and understanding of own knowledge.

The incentive affects the volitional sphere through success or failure.

The systematic approach to the analysis and research of the control over the evaluation of the results of the student achievements allowed to determine the relationship between the functions of the management cycle: planning, regulation (timeliness) and coordination, control, evaluation and incentives.

Assessment and stimulation - are closely interconnected and constitute a management cycle. In this cycle, planning is an initial function. Therefore, it is very important to determine the objects of control of organizational activity, which determines the educational process - the teacher and students. Consequently, a coherent study of the problem of controlling and verifying and



evaluating learning outcomes during the study of educational subjects is impossible without examining its interrelationships with planning and management functions.

The multidisciplinary nature of the middle level of education and the diversity of its goals predetermine the great difficulty in determining teachers' main tasks of studying a particular material. Therefore, beginning the study of a new topic, the teacher must once again carefully read how it is outlined in the program, compare it with the contents of the textbook, to imagine the sequence of deployment of material for a certain number of hours, the result to which should be sought. Proceeding from this, the objects of control, different types and methods of carrying out inspection work are defined within the system of lessons.

Thus, the systematic control of knowledge and skills of students is one of the main conditions for improving the quality of education. The teacher in his work should use not only the conventional forms of control (independent and control work, oral questioning) but also systematically invent, implement his means. Skillful teacher's management of different forms of knowledge and skills contributes to increasing the interest of students in studying the subject, prevents the backlog, provides active work of each student. Control should be educational, during which the individual characteristics of students is revealed, the level of preparation for employment is increased that allows to eliminate timely shortcomings and gaps in students' knowledge.