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# DIDACTIC SUPPORT IN THE INFORMATIZATION OF HIGH SCHOOL'S TRAINING PROCESS

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**Abstract.** *The article updates the problem of didactic support of educational process in high school in the context of informatization of educational process. Didactic support ensures the quality of vocational education, increases flexibility in multi-level training of specialists. The relevance of this article results from the necessity of research in the study of didactic support in informatization of educational process in higher educational institutions.*

*The author analyzes the benefits of informational didactic support'simplementationin higher educational institution in the context of modern requirements for education to enhance student's learning process. Special attention is paid to electronic books, the benefits of this type of textbooks are highlighted, and didactic requirements for their content are being formulated. The main conditions of implementation of tasks in the process of informatization of educational process's didactic support should be appropriate technical support, high scientific and methodological training of teaching staff in the field.*

**Keywords:** *didactics, informational technology, electronic textbook, learning process.*

Training of highly qualified specialists in all fields of knowledge involves the updating of the process of education's informatization, primarily higher education. This requires improving the didactic support of the learning process, which ensures the quality of vocational education aimed at professional self-identity, increase flexibility in multi-level training, social significance and prestige of knowledge that contribute to the formation of intellectual potential of the nation as the highest value of society.

Problems of modern didactic informational support of educational process to some extent are still at the initial stage. However, modern Ukrainian and foreign researchers, i.e. R. Williams, T. Galay, B. Hershunskyy, V. Glushkov, A. Ershov, O. Karpenko, O. Khutorskiy, etc., in their scientific researches refer to the problems associated with the use of modern information technologies during the educational process, focus on improving the learning process while their implementation.

*The relevance* of this article results from the necessity of scientific developments in the study of didactic support for informatization of educational process at higher educational institutions.

***The aim*** of our article is to explore the benefits of the information didactic support in higher educational institutions to enhance the learning process.

Independent work of students in the modern educational process is of particular importance, as evidenced by the increase in the hours of stipulated curricula. This vector of learning allows students to master scientific and methodological literature, training materials, to process lecture courses, prepare for practical classes, seminars, course works, diploma papers, etc. Computerization of educational process enhances the knowledge using information technology resources, such as Intranet, Internet, and software. Indeed didactics as a theory of education and learning the regularities of training, abilities, skills, formation of opinion, is a component of modern process of education's informatization. It defines the scope and structure of the training content, the use of informational technology. This is what actualizes the issue of proper informational didactic support of educational process in high school by creating electronic books, simulators, reference books, etc., the use of which contributes to the training of future professionals.

Modern scientists identify didactics as a part of pedagogy, the science of learning, exploring laws, principles, aims, content, forms, methods and means of training. Didactics involves the development of new methods, tools, educational standards, new educational materials, monitoring systems and evaluation of knowledge in the classroom. In turn, learning as an object of didactics is a focused and organized process of interaction between students and teachers, aimed at solving the educational problems, as a result of which students acquire knowledge, skills, develop personal qualities, etc. Basic principles and rules of didactics are aimed at implementing its components: connection between theory and practice; regularity and consistency in training of specialists; activity and independence of students' learning; combination of abstract thinking with clearness in teaching; fundamental learning; availability of scientific knowledge; unity of training and education in all forms of the educational process [3].Since the time of German educator Wolfgang Ratke, who was the first to introduce the term "didactics", key objectives of didactics - why, whom and how to teach,- remain unchanged; they are implemented in educational practice during the lectures, independent work, seminars, consultations, tests, exams and other forms of activities beyond classroom hours. These forms of educational process should be interdependent, interrelated, coherent and should be performed by the teacher during the training process by adherence to requirements for didactic activities in accordance with the principles of education. The unity of principles provides clear formulation of educational objectives and their consistent solution, optimal choice of content, forms of training, methods, means and tools aimed at developing of knowable activity and independent acquisition of knowledge under the guidance of a teacher. This is implemented in forms and means of

education as didactic components of the learning process: lectures, textbooks, etc.

Traditional lecture (introductive, problem-related, subject-related), despite the significant benefits, that are the direct influence of lecturer on a large number of students simultaneously, the effectiveness of mastering a material, the possibility of formation of ideology and believes, etc., usually cannot consider in detail all aspects of the subject. It is a conceptual reference point in studying the problem, which encourages students to turn to sources of information recommended by the teacher. This is the case when the value of new didactic means of training is amplified, which should ensure quick access to these sources through Intranet, Internet, where they are stored or where we confined the links of these sources to prepare to other forms of education (seminars, practical training, etc.) and control (tests, exams, etc.).Aristotle emphasized the importance of clarity and systematic presentation during lectures, as evidenced by his first works – textbooks. Later on, during modern times in "Dydahografiya" by Kamenskiy Y.– theory of applying the book in studies as an important tool in the hands of the teacher, but not being an independent means of educational process – the basic requirements for the textbook were formulated: clarity, visibility, accessibility, small volume, pithiness [2].This is a textbook as an integrating set of teaching materials we consider the most important among other means of education in modern conditions of high school's informatization.

Textbook being an interconnection of science and didactics implements educational problems in the realization of its functions during the learning process. Academic information textbook should be logically structured and contain the following components: academic essay (introduction, main part and conclusion) and references (source data, annotation, contents, foreword, afterword, brief guidelines, didactic apparatus, indexes, notes, comments and annexes). Availability of these components is necessary for both traditional and electronic forms of textbook, but the capabilities of electronic ones are more integrating [1].

Didactic component of a textbook belongs to the reference and accompanying part. Its functional purpose reflects the model of CORE, where C corresponds to 'Connect to students' prior knowledge', O –'Organize new content', R –'Reflect on what has been learned', E –'Extend by transferring knowledge to new contexts' [4]. So this is the organization of training material that reflects the purpose of studying a certain subject, provides feedback in the learning process with the assessment of student's knowledge, strategies for further study of the subject taking into account all the principles of didactics. Didactic advantages of the electronic textbook are using hypertext and multimedia capabilities that allow us to:

1) repeatedly repeat explanation of the studied material;

2) maintain a feedback during the learning process;

3) perform automatic control of students' knowledge through tests: only having mastered the analyzed material, students have access to the next section;

4) consider the particular student's knowledge and develop his/her potential abilities through specialization of the complex of links and tests, depending on the individual abilities of students (level of preparedness, psychological and emotional type, etc.). This requires well thought-out navigation, which should be available constantly on the screen or at the request of the user, and the ability of the teacher to use it.

Due to the technology of hypertext and search capabilities of any word, every electronic academic textbook is potentially of educational didactic nature guide.

Considering the educational product and accompanying reference unit as the core and shell of the textbook, which cannot exist separately, we should consider the components of the work structure: informational, logical, psychological and aesthetic. Informational component is responsible for quality, amount of educational information needed to achieve the goal of the work. Logical component combines information specified in the categorization of the work. The psychological component activates thinking, curiosity, creative activity of the student. The correlation of content and work form (proportionality of parts, harmony, rhythm, etc.) pertains to aesthetic component.

Based on generalized requirements for didactic textbook, it is determined that:

1) the structure of the electronic textbook along with mandatory elements (content, preface, main part, conclusion, applications, indexes, etc.), should also include knowledge monitoring system, glossary and hyperlinked literature other institution's resources or Internet, and indications on the number and availability of training books, electronic textbooks, adapted to the specific curriculum of the higher educational institution's library; hypertext information should be divided into "layers" of the general character, every next of which should include clarifying information supplementing the previous;

2) the basic requirements for presenting the material in printed and electronic handbooks (curricula, knowledge presentation on a particular subject, purpose and educational content, logics of content; unification in terminology usage, symbols, etc.; problematics, accessibility, clarity, objectivity, consistency, interdisciplinary and encyclopedic presentation of educational material; availability of forms of control regarding students' level of mastering the information and feedback; adjustment of content's complexity to students' abilities; reflecting changes in language policy taking place in social and cultural spheres of a particular state, etc.), are implemented in electronic books through their openness;

3) electronic textbook should have minimum textual and maximum illustrative information in accordance with ergonomic capabilities of human perception of information (audio, video, colors, fonts, etc.), given the allowable resolution of the monitor screen in reflected light, etc.; verbal information of electronic textbook should be pronounced.

Thus, we can make a ***conclusion.*** In terms of large-scale transition from one form of storing the information to another, use of electronic textbooks is considered in complex with other educational systems. Informatization process at higher educational institutions should be based primarily on the principle of continuous use of educational resources such as Intranet / Internet sites of all academic disciplines. The main condition of implementation of didactic support's informatization of the educational process should be an appropriate technical support and methodical training of the teaching staff in the very field. This is the prospect of further research in the area. Informational didactic support in the educational process will improve the quality of education, actualize certain trends, contents, technology, methods of forming a system of professional thinking in training wide profile professionals of the 20[th]century being a creative personality.

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