International Journal of Pedagogics
(ISSN – 2771-2281)
VOLUME 03 ISSUE 05 Pages: 134-138
SJIF IMPACT FACTOR (2021: 5. 705) (2022: 5. 705) (2023: 6. 676)
OCLC – 1121105677
Crossref doi Google Scholar WorldCat MENDELEY

Publisher: Oscar Publishing Services

Journal Website: https://theusajournals.com/index.php/ijp

Research Article

THEORETICAL AND PRACTICAL FOUNDATIONS OF THE FORMATION OF THE INFORMATION ENVIRONMENT OF THE EDUCATIONAL PROCESS USING COMPUTER TECHNOLOGY

Submission Date: May 19, 2023, Accepted Date: May 24, 2023,
Published Date: May 29, 2023
Crossref doi: https://doi.org/10.37547/ijp/Volume03Issue05-26

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ABSTRACT

The article is devoted to the analysis of computer technologies used in the professional training of future specialists; training of future specialists in the context of a competence-based approach to education and the didactic foundations of the formation of professional competence of students of the transport University using electronic learning tools.

KEYWORDS

Educational technologies, information security, electronic learning tools, individual approach to learning, professional competencies, informatization of the educational process.

INTRODUCTION

The main and main goal of the higher education system of our country is to educate a generation capable of making decisions, bringing maximum benefit to the state and society. To achieve this goal, it is necessary to constantly improve the education system, to ensure the improvement of the quality of education.

The continuously increasing volume of information in all branches of human activity and the increasing need for its prompt and complete receipt have led to the intensification of work in the field of creation and implementation of computer information technologies. The development of tele-communication systems and the use of INTERNET technologies have made it possible to bring informatization to a new

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qualitative level. Modern automated information systems, relying on the latest achievements in the field of hardware and software and telecommunications systems, make it possible to store large amounts of information in a database, support distributed data processing, and provide access to system resources, both via a local computer network and via the INTERNET.

RESEARCH METHODOLOGY AND ANALYSIS

The basis of the information support of the educational process is a database of educational materials. An individual educational environment is effective only if it ensures the learner's assimilation of educational content at both theoretical and systemic and practical levels of assimilation.

The use of individual educational technologies in teaching puts forward new requirements for the implementation of interaction between both the teacher and the student, for the organization of the educational process itself and the structuring of educational material. The problem is that modern textbooks, educational materials (meaning textbooks on information technology), basically do not meet the requirements for such when forming an individual educational trajectory.

The material in the textbooks is structured only by sections of content, the links between sections are not indicated, the necessary theoretical and practical minimum for training in this discipline is not specified, there are practically no final certification tasks, the complexity of individual tasks is not indicated.

In the best case, tasks are divided into tasks for joint performance in the classroom, for independent performance, for home performance, there is also a division of tasks into standard tasks and tasks of increased complexity. The theoretical material is presented in textbooks linearly, hyperlinks and nonlinear connections are absent in traditional textbooks. On the other hand, the differentiated training received on the basis of individual trajectories will allow graduates to find their place in the labor market faster, adapt to the demands of employers, and adequately occupy their niche as a professional. The way out of a difficult situation would be to create a database of educational materials and a database of academic performance records for educational modules.

To increase the effectiveness of the educational process on the basis of an individual educational trajectory that can take into account both the needs and abilities of students, it is necessary to create databases of educational materials that would allow classifying educational materials according to the selected modules of the discipline, would indicate direct and indirect links between individual modules, would contain sets of tasks indicating their complexity and time of execution.

Based on the use of the training modules database, it is possible to ensure a consistent systematic assessment of the level of knowledge acquisition in all parts of the module based on objective indicators.

Another problem of the transition period may be the low quality or lack of demand for learning outcomes along any educational trajectory. Thus, the task arises of assessing the quality of the chosen educational trajectory in the absence of experimental data on the demand for graduates' data from employers.

RESULTS

One of the main tasks of any educational institution is to introduce into its activities a methodology for

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measuring the quality of educational services based on marketing tools. To achieve this goal , it is necessary to define and solve the following tasks:

1. Choosing a marketing concept for the quality of educational services;

2. Determination of relevant criteria for the quality of educational services;

3. Conducting marketing research;

4. Creation of a research data analysis algorithm for an automated results processing system;

In modern market conditions, the development of the Uzbek education system is determined by changes in a number of factors, among which the most important are:

1. State policy in the field of education (transition to new generation standards);

2. Transformations of the social and economic environment characteristic of the time of market changes (the market of educational services is expanding, the competition of paid and free education);

3. Social attitudes of the population (on the quality of education and on the state diploma);

Project activity of students. The multifaceted possibilities of educational resources of the Internet in research activities allow students to organize project activities.

In the lessons of generalization and systematization of knowledge and methods of activity, we offer students to perform project and creative work: computer presentations, web quests or thematic web pages, the application of the studied material in other fields of knowledge. Then these works are presented and defended before the students of the group in the form of a presentation, brochure, booklet, collage (Publisher) and video, the results are collectively analyzed and reviewed.

This type of work develops the creative, research abilities of students, increases their activity, contributes to the acquisition of skills that are very useful in life. Information technologies create conditions for students' self-expression: the fruits of their creativity may be in demand, useful for others. Such a perspective creates the strongest motivation for their independent cognitive activity in groups or individually.

CONCLUSION

There is a situation in the modern education system when established methods, techniques and forms of teaching require reflection, correction and new pedagogical solutions. This is primarily due to the widespread introduction and widespread use of computer technologies. Having studied the state of the problem of the use of ICT tools in education, we can conclude that the effectiveness of the use of ICT depends on the ways and forms of application of these technologies, on how well the teacher knows the methodology of working with them, on the electronic resources he uses.

Thus, in order to increase the efficiency of the transition to individual educational technologies, it is necessary to clearly structure the educational material and the requirements for the assimilation of educational material, the problem of assessing the quality of various individual educational trajectories from the point of view of their further demand from employers also needs to be solved.

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