Spectrum Journal of Innovation, Reforms and Development
Volume 17, July, 2023 | ISSN (E): 2751-1731
Website: www.sjird.journalspark.org

SCIENTIFIC-RESEARCH METHODS OF THE DISCIPLINE OF EDUCATIONAL TECHNOLOGIES AND ITS RELEVANCE TO OTHER SUBJECTS

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Abstract
The scientific-research methods of the discipline of Educational Technologies articulate the approaches utilized in educational practice based on research and scientific principles to further the development of education. These methods aid in the understanding of the educational process, student engagement, information delivery, and reprocessing based on scientific foundations.

Keywords: Educational Technologies, research methods, integration, content mastery, reporting and statistics.

Introduction

In recent years, the issue of shaping modern educational approaches aligned with our national and cultural values, encompassing the achievements of world intellectual heritage, has emerged in the education system, reflecting the intellectual potential created by our ancestors. The progressive development of society relies on a mature generation. Therefore, in our country, the state policy of providing education to a mature generation has been raised to a higher level, both physically and intellectually. In terms of educational practice, the establishment of interdisciplinary connections in school education signifies the profound manifestation of ongoing integration processes in the subject and societal life today. This connectivity plays a significant role in enhancing students' knowledge assimilation, developing their comprehensive understanding of the world, and improving their practical readiness.

The initial task of implementing integration in primary school is carried out by the teacher themselves. The word "integration" is derived from the Latin word "integer," meaning whole. The concept of integration is taught as two distinct processes. Firstly, it refers to the concept that signifies the interrelation of separate layers and tasks of a system or organism, and the process that leads to this state. Secondly, it refers to the process of bringing together subjects that are implemented in conjunction with the process of differentiation. From a genetic perspective, integration involves the synthesis, expansion, and deepening of the content of subject-interdisciplinary connections, establishing logical consistency and a higher level of content in at least the standards of education. The field of educational

technology encompasses pedagogy, psychology, nature, our national history, practical activities in the classroom, native language, visual arts, literature, and economics. Students can apply the knowledge they learned in mathematics classes such as counting, addition, subtraction, in technology lessons. For example, students can count and arrange several flower petals to form a circle. All acquired knowledge is reinforced in technology lessons.
In addition, the scientific-research methods of the discipline of Educational Technologies encompass analysis, experiments, surveys, evaluation of textbooks and curriculum, monitoring and analysis, data analysis and statistical analysis, obtaining important scientific information about issues and aspects in the field of education, and other research methods.
Research methods of the science of educational technologies are also related to other disciplines. It is related to the process and methods of research, pedagogy, psychology, informatics, information technology, the ability to analyze and integrate scientific data. For example, the relationship between educational technology and psychology includes analysis and research on increasing student motivation in the educational process, self-assessment of mastery, and improving the quality of education.
Other disciplines, such as information technology, statistics, pedagogy, art, sociology, marketing, etc., study educational technology to study and develop the use of educational technology research methods and their results or effective experiences. can help.

Research methods of the science of educational technologies, analysis of learning and teaching processes in the field of education, study of the use of technologies for students, increasing the effectiveness of teaching new technologies and tools, and other aspects of education includes studying the relationship between the sciences. The following main research methods are popularized in this field:

1. Analysis and Description: This method is based on analyzing the educational processes, the objectives of learning, and the technologies and tools used. It involves analyzing how students, teachers, and other educational organizations work with technological tools, how they utilize them, and their effectiveness.
2. Experimentation and Practice: This method is crucial in implementing and incorporating educational technologies into the teaching and learning process. Teachers and students engage in practical activities to experiment with and learn how to use new technologies, as well as to independently utilize them. Through this process, ideas about the instructional demonstration, learning, and experiential-based assimilation of technology, and their effectiveness, are acquired.
3. Surveys and Questionnaires: This method is based on gathering feedback, opinions, and evaluations from students and teachers during the utilization of technologies. Surveys allow students to express their thoughts about the use of technologies and how they benefit from them. It helps in understanding the acceptance of technologies and learning by students, as well as their experiences and expectations.
4. Reporting and Statistics: This method is utilized to analyze the results of teaching and learning through the use of technological tools. It helps assess the students' level of knowledge assimilation, improvement in learning, and the effectiveness of using technological tools in the learning process. This method enables the determination of the

degree of student assimilation and the amount of benefit derived from educational technology tools.

5. Educational Psychology and Cognitive Research: These methods focus on understanding the impact of utilizing technological tools on students' learning processes and cognitive activities. Psychological research helps analyze how students utilize technological tools, how they acquire information from them, and how they process information.

The field of Educational Technologies is interconnected with other subjects such as Informatics, Events Management, and others, aiming to explore the theoretical and practical foundations of both technologies and other disciplines. This allows for the analysis of the processes of interrelation between technologies and other subjects, the methods of explanation, and the technological tools and innovations in the learning processes.

Pedagogical analysis method is a research method used to determine the level of organization in philosophical, psychological, and pedagogical aspects of a chosen problem, within the process of conducting research. It serves to substantiate the theoretical validity of the researcher's proposed idea from a philosophical perspective and contributes to the field of psychology and pedagogy.

The method of teaching children creativity is utilized with the aim of determining the suitability, abilities, as well as the level of knowledge, skills, and competencies in specific areas of study. It relies on the creative work of students such as their daily activities, compositions, written assignments, reports, and serves as an important means of evaluation. The advantage of this method lies in its ability to identify, evaluate, and foster the individual potential and capabilities of each student.

Pedagogy, being the discipline that teaches educational methods, is inherently linked to technology instruction. Psychology, on the other hand, takes into account the students' psychological processes when implementing technology-based lessons. Considering the impact of technology on students' mental well-being is essential when incorporating any element into the learning environment.

The connection with our national history provides students with the opportunity to enhance their critical thinking skills by teaching them based on new knowledge and conducting excursions and practical tasks based on what they have seen during excursions. The practical activities in the educational workshop associated with this subject are designed to prepare students for all the tasks performed during the learning process, to determine which subjects require new methods and approaches, and how to make use of them.

In the field of technology education, students acquire initial knowledge about technology, how to plan, direct, allocate, organize, and implement various tasks in relation to them, the structure, operation, and use of hand and electrical tools used in the execution of these tasks, safety rules, sanitary and hygienic requirements, the development of marketing and management activities, the relevance of modern production to market conditions, income acquisition and distribution principles, the establishment of a well-organized and productive labor force, and the development of skills for environmental protection and practical application.

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