INFORMATION TECHNOLOGY SUPPORT OF EDUCATIONAL PROCESSES FOR INDIVIDUALS WITH SPECIAL NEEDS

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The development and verification of the corresponding mathematical model is based on a comprehensive study of problems occurred in IT support of the education for individuals with special needs. The purpose of this paper is to analyze basic educational processes with the focus on people with special needs. To achieve this aim it is necessary to investigate the functional stages of the educational process for individuals with special needs, taking into account its specific characteristics. The educational processes for people with special needs are selected as an object of this study. The subject of the presented study is information technology support of the educational process for individuals with special needs. Scientific innovation of the results, achieved in this study, lies in substantiation of the applied scientific problem of educational process support for individuals with disabilities using modern information technologies. The methodological basis for the creation and application of the IT support complex of educational processes for individuals with special needs has been developed.

The author of this paper analysed the level of development of IT support, used to maintain educational process for individuals with special needs. Both in Ukraine and abroad the IT support of such process for this category is irregular, unsystematic. Algorithmic tools that are used to maintain the educational process are not linked; there is no systematic management of educational environment for persons with special needs. The author stresses the need of an integrated system of IT support for all phases of the educational process for individuals with special needs. The requirement of the personalization of individual educational requirements for this category of people is emphasized.

The study of the educational process for people with special needs allowed to distinguish its four stages: the collection of personal data, the analysis of collected data, a personal curriculum development and the assessment of individual educational progress. Moreover, the performance of each next stage depends on the results, obtained in the previous stage. Based on the results of this study, description and formal continuous model of education process management for persons with special needs were formulated. Such formal model allows individual planning of the educational process for persons with special needs, taking into account a large number of crucial factors.

Qualitative information and technological support of the educational processes for people with special needs is the latest scientific and practical task, accomplishment of which will help to facilitate the social adaptation process of individuals with special needs.

Keywords – information and technological support, educational process for individuals with disabilities, special educational needs, inclusive education, individual curriculum.