



## **BIG DATA ANALYSIS IN EDUCATION**

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<b>Received:</b> April 6 <sup>th</sup> 2023 <b>Accepted:</b> May 6 <sup>th</sup> 2023 <b>Published:</b> June 11 <sup>th</sup> 2023	Today, information is the basis of any modern educational process, a tool for effective management and optimization of learning processes. Big data analytics will help to identify and even prevent many problems in training in a timely manner. To understand the possibilities of modern technologies and choose among them the best ratio of quality and result, the teacher needs to understand the basic concepts (Big Data). Today, in our Republic, much attention is paid to the education and training of modern personnel in all areas (Big Data) is one of the good tools for solving these problems.
<b>Keywords:</b> Digital age, machine learning, Big Data, education, distance education, educational process, modern learning technologies.	

Target. Get an understanding in the basic concepts of Big Data, Machine Learning, Artificial Intelligence

"Big data allows you to learn everything about the system, not only how this system behaves at a certain point in time, but also how it behaved for a long time before this current study. And if there is this data, then we can assume how it will behave in the future and much more ... Therefore, the ability to work with Big Data provides more opportunities and results.

Education in this case is gradually moving from dry theory to teaching practical modules. That is, it becomes possible to study systems not theoretically, but practically, by collecting and analyzing data on the operation of systems.

Moreover, this is applicable not only directly in the operation of training programs in a particular direction. A person is also a system that can be analyzed, adjusted according to parameters, and in accordance with them, predict the result. For example, if we take any school class, we will get at least several groups of students for whom the setting of the training program may be different. The main criteria by which they will differ is the ability to learn and the type of perception of information.

Of course, the teacher takes all this into account, combining the presentation of the material within the lesson, homework and, if necessary, additional classes. There have always been excellent students in the class, for whom the school curriculum comes easily, and there were those who have to pull on the three with a creak. And there are those who perfectly memorize ten poems in a row, and forever write geometry formulas on their knees - no one has canceled physicists and lyricists. Someone perceives information better visually, someone by ear, and

someone in the form of tables. In and of themselves, these criteria are nothing new.

However, in any case, within the framework of the lesson, the teacher cannot deal with everyone individually, but can only combine different presentations of information according to the types of perception and dwell on the most difficult moments in more detail. The use of Big Data makes it possible, on the one hand, to automate and expand the analysis of the learning process, using all the accumulated experience in each specific area, on the other hand, to set up an individual educational trajectory. In the future, this should also become the task of artificial intelligence, a virtual tutor.

It should be noted that Uzbekistan lags behind the leading countries in terms of the share of skilled workers, and in case of inertial development, the education system in Uzbekistan may be aggravated without reforms, it is not able to solve these problems. Therefore, there is a need to stimulate the acquisition of competencies in the field of artificial intelligence and the preparation of workers for the transition to the knowledge economy.

It is likely that routine work will be replaced by mechanisms in the future, and this, of course, cannot but affect vocational training programs. "We talk about the fourth industrial revolution all the time. But what we don't realize is that we're in the middle of a fourth educational revolution. Occupations that have "lost their relevance" can drag along those educational structures that are now working for this labor market, and this will lead to the loss of relevance of these structures.

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