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Econometric Methods Aimed at Improving the Quality and Digitalization Of Educational Services

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ABSTRACT

In this article, the main goal of education in the modern world is to prepare the future specialist for real life and work, to reveal his professional potential, to develop his qualities and abilities, including the need to contribute to the formation of powers for the use of econometric methods.

econometrics, intellectual potential, improving the quality of educational services, econometric methods, innovation, digitization.

Introduction. In the modern world, the main goal of the educational service should be considered as the preparation of the future specialist for real life and activity, revealing his professional potential, the development of his qualities and abilities. At the same time, education should contribute to the formation of competence in the development of intelligence, memory, the development of the ability to make optimal decisions, the use of modern technologies, including econometric methods.

Improving and digitizing the quality of Educational Services is a necessity of the current obyektiv. To date, the digitization of socio-economic processes has become a worldwide discussion. The whole world has adopted the idea of digital transformation. During the period of digitization, the formation of continuous self-education of future specialists is required, taking into account the rapidly developing technologies in all spheres of social life.

Digital technologies are the main means of accessing many sources of information and give impetus to self-promotion, the process of transforming the data obtained independently izlash, the analysis and use of them. The most basic process in the organization of a quality education service is the digitization of reading and teaching technology. This type of Educational Service is a system aimed at the application of scientific knowledge, scientific approaches in the analysis and organization of the educational process, taking into account the communication innovations of teachers, it is established to achieve high-quality levels in the development of the student personality. The transition to the digital technological level of teaching and the implementation of this project makes the teacher become a highly qualified quality specialisttiradi, and also significantly increases the role of the student himself and opens new horizons.

Research Methodology (Research Methodology). When we look at the economy from the point of view of digitization, informatization, this is a modern form of informatization of society1. To date, there are many definitions of digital transformation. The

meaning of this digitization develops along with the term informatization. Digitization is the transformation of information from "physical media to digital media" to utish2.

Informatization is an improvement in the quality of information as part of digitization, there is no change between them and in their content, it is simply converted into an electronic form for further processing. If we classify, it will be possible to associate this approach with the 3-th Industrial Revolution.

The revolution, which lasted from 1969 year to 2010 year, is the process of adding data that has become a digital format that allows to improve the existing business. Digitization is the creation of a new one initially. Therefore, the main difference between digitization (digitization) is the creation of a new innovative product with a new function. Therefore, the main difference between digitization (digitization) is the creation of a new innovative product with a new function.

There are rational and consumer characteristics of digitization, first of all models aimed at improving the existing business and the transformation of business processes, which will allow to achieve significant success in business and new competitive advantages. Digitization is already the fourth element of the industry.

Digitization scientific and technological progress, using self-regulating techniques, allows to free a person from participation, through means and mathematical methods, to increase labor productivity in the processes of transformation, transmission and use, improve quality. It is the removal of man from the production of dangerous for human health"3.

Teaching aids in the development of creativity in quality education service, is regarded as a set of technical and instrumental tools of computer technology and as a system of scientific knowledge about the role of computer technology. The forms and methods of their application of digital technologies change in order to improve the quality of the educational process, teachers and students ' learning. **Analysis and Results (Analysis and results).** Digital technology in the provision of quality educational services is an effective means of improving the quality of the educational process, ensuring the discovery of new ways of solving urgent pedagogical problems and optimal management of the educational process. The main feature of digital technologies is that they work as a tool for modeling, interaction and the organization of similar joint events, "the student – Tyutor"... The main feature of tutors is that they provide almost unlimited opportunities for independent and joint creative activities of students.

Digital technology is an indispensable tool with information and communication technology, with the help of which teachers can qualitatively change their teaching styles and organize the forms of the educational process in a new way, increase the level of materials under study, better develop the individual characteristics of students and organize independent work. The use of digital technologies faxes and improves cognitive capabilities kengaytiradi a collection of common logical methods of activity, thinking and special methods of mental and practical activity.

The use of digital technology stimulates the methods of teaching subjects and increases their quality. The use of digital technologies in practice is to improve the quality of generally accepted teaching methods (lecture, story, narrative, etc.), independent working methods, visual teaching methods (workshop and laboratory sessions) and transform the learning process.

At the present stage of improving the quality of educational services, the requirements for a higher level of Economic Education, reflecting innovations in economic theories, determine the need for specialists to use digital technologies and apply modern methods of work that science understands. Most of the new scientific methods in socio –economic processes are based on econometric models, concepts and techniques, and how to use them without being aware of Mathematical Statistics and economics can not be studied. Almost any sphere of Economics and management is engaged in statistical analysis of empirical data, therefore, it uses an econometric method with the use of one or another digital technology.

Thanks to the use of Information Communication Technology, econometric education has become widespread. It should be noted that the opportunities for distance education have also expanded with the use of Information Communication Technologies.

In the training system, we can not say that this was a high level of risk, not looking at the existence of econometric training. Because so far there is a problem of the use of ICT. One of the modern econometric researchers D. Hendry said there are many problems that modern experts face when it comes to using econometric methods, noting that there are these problems among the economists themselves4.

In recent years, many educational literature has emerged from the economy with the aim of increasing the use of ICT and the quality of Education. In Particular, S. A. Ayvazyan and V. S. Textbook "practical statistics" created by Mkhitaryan. "Fundamentals of econometrics" 5 reflect the position of the Moscow School of econometrics. (Faculty of economics of Lomonosov Moscow State University, Moscow State University of Economics, Statistics and informatics, Russian School of Economics). In addition to the classical sections of the economy, it includes detailed materials on multivariate statistics. (Markov chains, classification of multivariate observations, methods for reducing the size of the factor space under analysis, etc.). The purpose of the authors was reflected in the composition of various subjects of the "systematic perception" probability and statistical profile in improving the quality of Education, demonstrating the courses on the theory of probability, mathematical statistics, multivariate statistical analysis, time series analysis and econometrics.

Textbook "econometrics" created by teachers of the Department of Statistics and econometrics of St. Petersburg State University of Economics and finance under the editorship of eliseyeva6. V.I.Suslov, L.P.Talisheva and A.A.The textbook "Econometrics", created by Siplakov, was compiled in accordance with the curriculum of the Faculty of economics of the 7 Novosibirsk State University and was proposed

the Academy bv Russian of **Economics** "Econometrics" N.P.Tixomirov and E. Y.Doroxina. G.V.Plekhanov and others 8. It considered the construction of econometric models. including models of Financial Econometrics and their use in forecasting socio-economic processes. Its main idea can be considered an econometric modeling. Each textbook obtained separately meets the relevant requirements of the state educational standard and at the same time reflects an understanding of the content of "econometrics" tools and methods in improving the quality of Educational Service.

In the textbook "Econometrics", created under the wording of Yeliseyeva, the terms and methods for constructing econometric models based on 9 spatial and temporal data are considered. In its sections, the evaluation of parameters by the method of the smallest squares, the evaluation of parameters by the method of the maximum probability, the autocorrelation function, the structure of the time line, ikkilik and several selection models are described in detail. In general, the textbook is devoted to the practical problems of modeling and forecasting in the economic Methodological sphere. guidelines and solutions to the usual problems are carried out using the statistical package Exsel and Statgraphics.

V. I. Suslov, L. P. Talisheva and A. A. Siplakov textbook" Econometrics " 10 authors tried to systematize and combine different sections of economic statistics and econometrics. In the textbook, specific issues of Econometrics for the introduction to socioeconomic statistics, regression analysis, time series analysis and reading to the master's degree are indicated. Here the mathematical basis is given to various statements, which are simply explained in other textbooks, which facilitates the perception of the material under study. The practical part is basically TA5K-TEMPT. The work on the 18 program is based on the results. Econometrics are collections of many problems and methodological guidelines for laboratorv work. for example. T.A.Ratnikova, O.A.Demidova "collection of problems in economics"for students of nonmathematical specialties" 11 or I. N. Molchanova and I. A. Gerasimov"computer workshop on the initial course of Economics (implementation in the EViews program)" 12 and others propose the use of econometric EViews and STATA computer packages to solve practical problems.

The above publications, in our opinion, do not fully meet the requirements and opportunities of all students of economic specialization, because they imply a sufficiently high level and the use of special econometric packages, which significantly increases the time of those who are difficult to accept, master the material.

Academic V.L.Makarov gives a very interesting idea of the practical significance and educational significance of textbooks on econometrics. In his opinion,"... econometrics are not only science, but also art. The art of working with data is" and"... art can not be mastered only by reading books. You almost have to listen, count and recalculate the data"13.

It can be argued that the choice of textbook as the main textbook for teaching economics is not a determining factor in the quality of material assimilation, since there is a need to choose the optimal information and communication technology for teaching.

Conclusion/Recommendations. Initially, in order to successfully solve the main task of ensuring the mastering of the system of scientific knowledge in econometrics and mathematical statistics by students, information and Communication Technology (ICT) should provide the following 14:

• visual presentation of the sequence of conclusions, the pointless clear logic of presenting a material that allows us to determine the content and structure of scientific methods of science;

• provide instructional materials in accordance with the structured scheme taking into account the multi-level preparation of students, their desires and interests;

• tools and methods (successful selection of tasks, inclusion in the training material) that can increase the motivation of

students for their educational activities, practical and professionally oriented tasks, etc.);

• to encourage students cognition activities and the various ways to manage it;

• management system of knowledge, skills and abilities acquired by students in the subjects studied;

• a system of tests, exercises and assignments aimed at identifying the essence of errors in material assimilation and identifying their causes;

• visual and technical tools system.

References

- Плотников В.А. Цифровизация производства: теоретическая сущность и перспективы развития в российской экономике // Известия Санкт-Петербургского государственного экономического университета. – 2018. –№ 4 (112). – С. 16-24.
- 2. Hendry, D.F. Dynamic Econometrics [Text] Oxford University Press, 1995
- Айвазян, С. А. Прикладная статистика. Основы эеонометрики [Текст]:учебник для вузав : в 2 т. / С. А. Айвазян, В. С. Мхитарян. – М.:ЮНИТИ-ДАНА, 2001. – 56 с.
- Елисеева, И.И. Эконометрика [Текст]: учебник / И. И. Елисеева,С. В. Курышева, Т. В. Костеева и др.; под ред. И. И. Елисеевой. –М.: финансы и статистика, 2005. – 576 с.
- Суслов, В.И. Эконометрия [Текст]: учебник / И. В. Суслов, Н. М. Ибрагимов, Л. П. Талышева, А. А. Цыплаков // Новосибирск :Изд. СО РАН, 2005 – 744 с.
- 6. Ergashev, N. (2022, May). FEATURES OF MULTI-STAGE TRAINING OF **TEACHERS'CONTENT** T0 PROFESSIONAL **ACTIVITIES USING** TECHNOLOGY CLOUD IN THE CONDITIONS OF DIGITAL EDUCATION. In International Conference on Problems of Improving Education and Science (Vol. 1, No. 02).
- 7. Ergashev, N. (2022, May). THEORETICAL STAFF TRAINING USING

CLOUD TECHNOLOGY IN CONTINUING EDUCATION. In International Conference on Problems of Improving Education and Science (Vol. 1, No. 02).

- 8. Ergashev, N. (2022, May). PROBLEMS OF USING DIGITAL EDUCATION IN PEDAGOGICAL THEORY AND PRACTICE. In International Conference on Problems of Improving Education and Science (Vol. 1, No. 02).
- 9. Ergashev, N. (2022, May). THEORY OF TRAINING OF PEDAGOGICAL PERSONNEL IN HIGHER EDUCATION USING CLOUD TECHNOLOGIES IN THE CONDITIONS OF DIGITAL EDUCATION. In International Conference on Problems of Improving Education and Science (Vol. 1, No. 02).
- 10. Ergashev, N. (2022, May). PROBLEMS OF DIGITAL EDUCATION IN PEDAGOGICAL THEORY AND PRACTICE. In International Conference on Problems of Improving Education and Science (Vol. 1, No. 02).
- 11. Ergashev, N. (2020). Didactic fundamentals of electronic books visualization. An International Multidisciplinary Research Journal.
- 12. Ergashev, N. (2020). Using the capabilities of modern programming languages in solving problems of technical specialties. An International Multidisciplinary Research Journal.