of production, as evidenced by the obtained zootechnical indicators of broilers, the amounts of feed expended and the values of the productivity index.

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## NETWORK INTERACTION ROLE IN PREPARING STUDENTS FOR INDEPENDENT DIAGNOSTICS IN THE DEMO EXAM FORMAT BASED ON STANDARDS FOR WORLDSKILLS RUSSIA

Gryazneva Svetlana Andreevna, Post-graduate student of the Department of Pedagogy and Psychology of Professional Education of Federal State Budgetary Educational Institution of Higher Education "Russian Timiryazev State Agrarian University", griazneva.svetl@yandex.ru Fomina Tatiana Nikolaevna, senior teacher of the Department of Foreign and Russian Languages of Federal State Budgetary Educational Institution of Higher Education "Russian Timiryazev State Agrarian University", tfomina67@mail.ru

**Abstract:** The article discusses the possibilities of organizing and preparing students for Worldskills competitions to improve professional training quality and broaden contacts with social partners.

**Key words**: secondary vocational education system, WorldSkills movement, in-plant training.

On the one hand, contemporary labor market is sure to require a competent specialist with a strong educational foundation and professional training, that is a person, who can independently acquire and apply knowledge in practice, solve any professional problems. But on the other hand, employees with a high level of professional values development are high demand. Any future specialist should understand values and significance of his profession, fill collar, realize that he is responsible for the implementation of his professional activities, etc.

At present the most important task of the vocational education system is supposed to be improvement of training quality of students and teaching staff in accordance with the modern level of production development and employers' expectations. Enterprises need specialists who are ready to be included in further professional activities immediately after graduation, capable

of solving practically professional tasks and problems.

Participation of students in the Moscow Masters Open Championship of Professional Skills based on standards for WorldSkills Russia (WSR) seems to be one of the effective tools for checking their training quality. Moreover students can take demo exams based on WorldSkills Russia standards within the framework of midterm and/ or end-of-course assessment.

Taking into consideration dynamic development of the WorldSkills movement in Russia, it is necessary to bring federal state educational standards (FSES) in tune with WSR standards, as well as with professional standards, i.e. in accordance with the employers' requirements. Due to methodological support, availability of assessment procedures, regulations for holding competitions, the WorldSkills movement allows to form learning policy providing a high training level for graduates of secondary vocational schools.

It goes without saying that practical training based on WorldSkills standards plays a significant role in the professional competencies formation, as well as professionally significant qualities of future specialists. Practical session development, as well as organization of academic and on-the-job training, taking into account WorldSkills standards, involves the use of different forms of organization and teaching methods.

In academic year 2020-2021, the demo exam as a part of an intermediate certification was decided to be taken by students of Moscow State autonomous secondary vocational institution - Polytechnic College No. 8 named after I.F. Pavlov. 26 second-year students passed the demo exam at the certified demo exam center. Their major of training was 15.01.32. An operator of computer controlled machine. Interpretation of the demo exam results was carried out in accordance with the procedure adopted for regional championships 'Young Professionals' (WorldSkills Russia) (Table 1).

Table 1 The ratio of the received grade points number to the maximum possible (%)

State final certification assessment	«2»	«3»	«4»	«5»
The ratio of the received number of grade points to the maximum possible,%	0.00–	20.00–	40.00–	70.00–
	19.99	39.99	69.99	100.00

It should be mentioned that all students coped with the tasks of the demo exam: 15.38% of students got an excellent mark, 53.84% of students got a good mark, and 30.78% students got a satisfactory mark. (figure 1).

The results obtained can be explained by the well-organized collaborative work and effort of the college staff and partner enterprise representatives in preparing students for the demo exam, as well as by a well-structured educational process, where theoretical and practical training of students has been balanced. The high results of the demo exam indicate that college students meet the modern requirements for specialists in their field of knowledge. It is worth noting that employees of JSC Moscow machine-building plant 'Avangard' were involved in the assessment of students as line experts that contributed to an objective assessment.

Final certification assessment in the demo exam format is believed to have a lot of advantages. Having passed certification tests in question graduates have the opportunity to:

a) confirm both their educational program mastering level in accordance with the Federal State Educational Standard and qualification in accordance with the requirements of international WorldSkills standards without passing additional certification tests;

b) reaffirm their qualifications in specific professional modules that are in demand by employing enterprises and receive a job offer at the stage of graduation.



Fig. 1. Demo exam results in academic year 2020/2021

Furthermore, educational organizations can objectively assess the content and quality of study programs, a material and technical base, and a teaching staff's qualification level, as well as, the direction of their activity to determine the points of growth for further development.

There are, of course, benefits for enterprises as well. First, they are able to select best young specialists for the required competencies; second, they can choose community colleges for cooperation in the field of personnel training and education.

Thus, using the ideology of the WS movement in the educational process, students are able to master professional competencies according to the federal state educational standards for secondary vocational education and advance labor functions of the Professional standards, on the other hand, the quality of professional training process may be improved, student's professional and creative thinking can be developed, the experience of creative activity in the professional sphere may be formed, the share of graduates employed in their specialty may be increased, relations with social partners can be improved and expanded. Hence the prestige of the given specialty will grow, especially provided it is in the TOP 50 in demand on the labor market.

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## DIGITAL TECHNOLOGIES IN AGRICULTURE

**Dayoub Nour**, Post-graduate student of the Department of the Economics of Federal State Budgetary Educational Institution of Higher Education "Russian Timiryazev State Agrarian University", nouramjad1992@gmail.com

Alipichev Aleksei Yurevich, PhD (Ed), Federal State Budgetary Educational Institution of Higher Education "Russian Timiryazev State Agrarian University", alipichev@rgau-msha.ru

Abstract: Technologies used in agriculture include communication networks, sensors, artificial intelligence (AI), big data, cloud computing, and these technologies connect together by the Internet of Things. Each one of these gives something useful to farming like processing, data collection, management, direction, and the ability to make decisions and then implement them. In this paper, we will show a group of important techniques used in agriculture.

Key words: digital agriculture, AI, big data, cloud computing, IOT.

**Introduction.** Farmers make decisions such as how much fertilizer to apply based on a set of unorganized measurements, experience, but the results aren't noticed until the harvest season. But if they use a digital agriculture system, it will gather data more repeatedly and precisely and combined with external sources (like weather data). The resulting collected data is analyzed and interpreted so the farmer can make more suitable decisions. These decisions can then be quickly implemented with greater reliability through robotics and advanced machinery. Digital agriculture brings together new opportunities, along with the widespread use of advanced, related, and data-intensive computer technologies, also called the industry 4.0 revolution, to agriculture.

**Big Data in agriculture.** Big Data can help improve forecasting and operational efficiency and lead to improved and timely decision-making. These technologies help analyze a big group of data sources for improved vision. This broadens the analytics and predictive options leading to better outcomes. Big Data technologies can affect an agribusiness in these areas:

- Weather data;
- Improved forecasting of yields and production;
- Better optimized livestock and seeds and new methodologies that improve production and yields;
  - Real-time decisions and alerts based on data from fields and equipment;
  - Integrated production and business performance data for improved decision making [4].

Cloud computing in agriculture. Cloud computing is the basic infrastructure that