Asesorías y Tutorías para la Investigación Científica en la Educación Puig-Salabarría S.C.
José María Pino Suárez 400-2 esq a Lerdo de Tejada. Toluca, Estado de México. 7223898475
RFC: ATI120618V12

Revista Dilemas Contemporáneos: Educación, Política y Valores.
http://www.dilemascontemporaneoseducacionpoliticayvalores.com/
Año: VI Número: Edición Especial Artículo no.:107 Período: Junio, 2019.

TÍTULO: Mejora de la calidad de la educación agraria como base para transferir tecnologías a la producción agrícola.

AUTORES:

1. N.V. Byshov.
2. L.N. Lazutkina.
3. V.S. Konkina.
4. M.A. Chikhman..
5. O.A. Fedosova.
6. T.A. Starodubova.

RESUMEN: Este artículo analiza el moderno sistema ruso de capacitación de personal calificado para el complejo agroindustrial. El desarrollo de la producción agrícola, la digitalización generalizada de la economía y la introducción de tecnologías de ahorro de recursos requieren un cambio en los enfoques de la capacitación de especialistas agrícolas, construyendo un modelo innovador de enseñanza en las universidades, creando centros de subcontratación sobre la base, que pueden mejorar la orientación práctica del proceso educativo y utilizar el potencial científico de la universidad para la transferencia de tecnología en el sector real de la economía agraria.

PALABRAS CLAVES: Educación agraria, subcontratación, estrategia para el desarrollo de la educación, transferencia de tecnología, agricultura.

TITLE: Improving the quality of agrarian education as a basis for transfering technologies to agricultural production.

AUTHORS:

1. N.V. Byshov.

2. L.N. Lazutkina.

3. V.S. Konkina.

4. M.A. Chikhman..

5. O.A. Fedosova.

6. T.A. Starodubova.

ABSTRACT: This article analyzes the modern Russian system of training qualified personnel for the agroindustry complex. The development of agricultural production, the widespread digitalization of the economy and the introduction of resource-saving technologies require a change in approaches to the training of agricultural specialists, building an innovative model of teaching at universities, creating outsourcing centers on their basis, which can enhance the practical orientation of the educational process, use the university's scientific potential for technology transfer in the real sector of the agrarian economy.

KEY WORDS: agrarian education, outsourcing, strategy for the development of education, technology transfer, agriculture.

INTRODUCTION.

Agriculture is one of the most important sectors of the state economy. However, neither financial nor organizational measures to support it will be effective unless the main issue is resolved, and that is providing the industry with qualified personnel.

Currently, the system of agrarian education has accumulated a lot of problems, reflecting its inconsistency with the modern needs of the economy of the agroindustry complex. The main reasons for this discrepancy are the weakness of the practical training of graduates; the poor material and technical base of universities; the disunity of agrarian organizations of the higher and secondary professional level; the low level of interaction between agricultural enterprises and specialized educational organizations in the learning process. The results of such processes are, on the one hand, a shortage of specialized specialists in agriculture who are able to solve production problems at a modern level, and therefore a decrease in the competitiveness of the industry, on the other hand, the reluctance of graduates to work in specialty.

The low popularity of agrarian labor among young people, including rural ones, is explained by the low level of wages in comparison with other sectors, the complexity and multifunctionality of activities, ideas about the archaic and backwardness of rural labor [Arruabarrena, et al. 2019]. At the same time, Russian agriculture is of strategic importance for ensuring the sustainable development of the society. It has a multiplicative effect for the development of the economy and, at the same time, is of exceptional social importance in comparison with other sectors of the national economy. In order to fully meet the demands of the innovative economy, modern agriculture must have a powerful foundation in the form of agrarian education, offering a dynamic range of training areas and a relevant profile orientation of educational programs implemented by universities.

Agrarian education should become attractive from the point of view of providing opportunities for self-actualization, development, professional and personal growth of students, which will create the basic conditions for achieving success in life and career [Balin, 2014; Maginga et al, 2018; Akimzhano et al, 2018]. Thus, improving the quality of agrarian education today is an urgent task, the solution of which will determine the welfare and independence of the state in the future.

The purpose of this study is to develop proposals for improving the quality of agrarian education on the basis of studying the theoretical aspects of agrarian education, strategic directions of state agricultural policy, as well as innovations in the field of educational technologies.

To achieve this purpose, the following tasks were solved:

1. The history of the agrarian education in Russia was studied.

2. The essence of concept "agrarian education" was defined.

3. The criteria and parameters of the quality of education were reviewed.

4. The development strategy of the Russian agrarian education up to 2030 was studied and the main disadvantages existing in the system of agrarian education at the present time were analyzed.

5. Modern educational technologies were analyzed.

6. Proposals were developed to improve the quality of education at agrarian universities and possible mechanisms for their implementation.

DEVELOPMENT.

Methodology.

The theoretical and methodological basis of the study included the works of Russian and foreign scholars in the history of agrarian education, criteria for the quality of education and innovative methods and technologies of advanced education in higher education. Other components of this base were the main strategic provisions for the development of Russian agrarian education until 2030 and publications with a focus on problems and prospects of agrarian education development.

When studying materials and writing the work two groups of research methods were used:

1. Theoretical: analysis, synthesis, comparison, abstraction, specification, generalization, formalization, analogy, identification and resolution of contradictions.

2. Empirical: the study of literature, documents and results of activities, expert assessment, the construction of hypotheses.

The organization of scientific research included three main phases:

1. A design phase (or preparation).

2. A technological phase (or research itself).

3. A reflexive phase (or a phase of evaluation and self-esteem).

Each phase included: the design phase (identifying contradictions, formulating the problem, determining the purpose and objectives of the research, forming criteria, building a hypothesis and planning the research); the technological phase (research, presentation of results) and the reflexive phase (evaluation and self-assessment of the results of the study) [Borovenskaya, et al. 2017].

Results and discussion.

In terms of the size of the territory, the Russian Federation is the largest state in the world, and according to Rosstat 13 % of this territory is the agricultural land. The area of agricultural land in farms of all categories is about 220 million hectares, of which more than 115 million hectares is the arable land.

For the purpose of rational and efficient use of resources in rural areas qualified personnel is necessary. Out of more than 146 million residents of the Russian Federation (37 million rural residents), 85 million people (21.1 million rural residents) are of working age. Based on this, every Russian interested (rural) resident of working age should be able to obtain special knowledge, abilities, skills and practical experience for the effective management of agricultural production that requires advanced development of the system of agrarian education [Buraeva, 2017; R & M, 2017; Ingavale, 2013].

Agrarian education is a type of education aimed at acquiring in the process of learning the knowledge, abilities and skills and the formation of competencies necessary for professional activities in production, processing and sale of agri-food products and other components of the functioning and development of the agro-industrial complex [Ajallooeian et al, 2015; Maharani & Subanji, 2018].

The system of agrarian education is an interrelated set of organizations providing training in programs of agrarian education, as well as representatives of parties interested in its high quality (including representatives of state authorities, local government, students, workers of educational organizations, employers' associations and other public associations) [Buraeva, 2014; Vdovina and Vdovina, 2015].

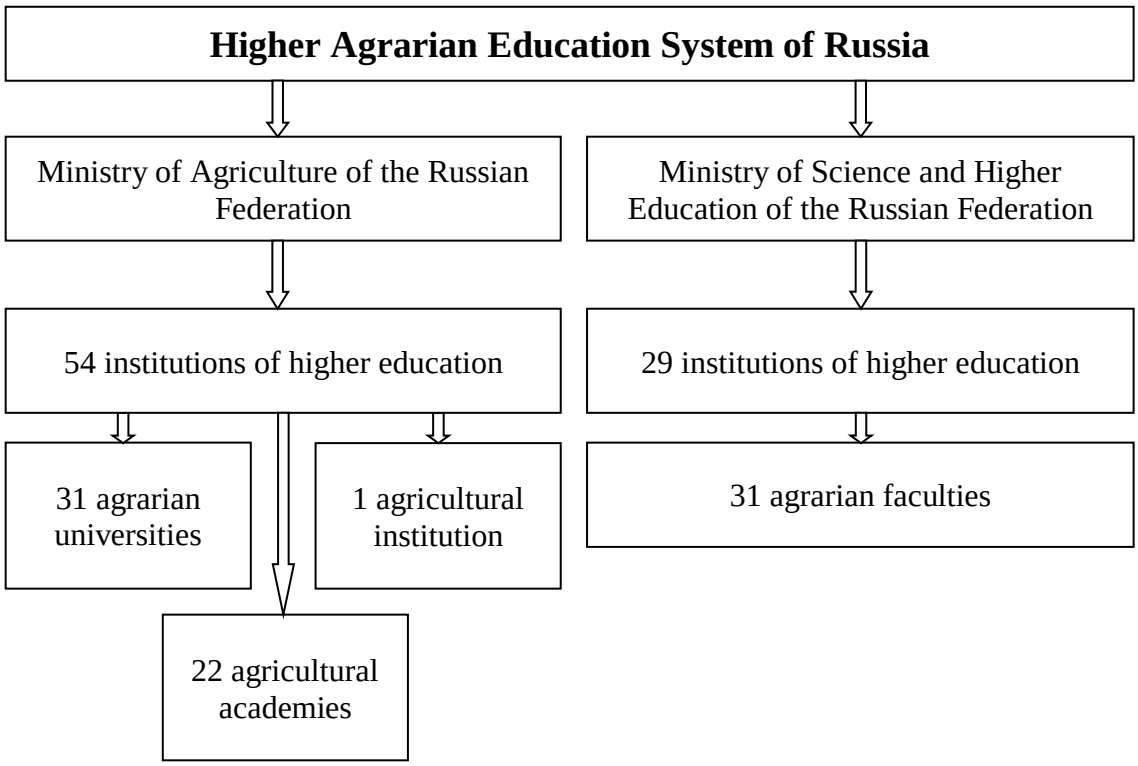
Agrarian education includes all levels of education:

- Professional education.
- Secondary vocational education.
- Higher Education.
- Additional professional education.

Today, the system of higher agrarian education of the Ministry of Agriculture of Russia includes 54 universities, among which 31 agrarian universities, 22 agrarian academies and 1 agrarian institute located in 58 regions of the Russian Federation. The system of agrarian education also includes 253 technical schools and colleges, which are under the jurisdiction of 73 subjects of the Russian Federation [Buraeva, 2014].

In addition to branch universities, 29 universities in the administration of the Ministry of Science and Higher Education of the Russian Federation have agrarian faculties in their structure. Higher Agrarian Education System of Russia is presented in Table 1.

Table 1.



In general, the strengths of the Russian agrarian education system are as it follows:

- Successful experience in the implementation of educational programs of all kinds, creating a reserve for lifelong learning, ensuring the continuity of programs in terms of education levels.

- Proximity to the consumer - agrarian universities exist in all major agroproducing regions of Russia, the state sector policy is implemented in direct interaction with the scientific and educational environment, which increases the control of the process of formation and continuous improvement of the personnel potential of the agroindustry complex and rural areas.

- In the context of the growing need for import substitution, agrarian universities, technical schools and colleges, which are in many respects institutions of transformation for small towns and rural settlements, have been assigned the significant role of regional centers for training the necessary industry personnel and supporting sustainable rural development.

- A high degree of identity of educational programs allows in a short time to move on to the implementation of network education to use the comparative advantages of each agrarian educational institution and increase academic mobility of students and teachers.

To improve the quality of agrarian education and its rapid adaptation to new economic realities, systemic transformations are necessary in all spheres of the agricultural sector of the economy, including legal, organizational, economic and social ones [Cherkasov, 2012]. In this regard, the priority areas for improving the educational process in agrarian universities are:

 Implementation of the principle of agrarian protectionism, which allows to increase the prestige of labor in rural areas, to show the interest of the state in the effective development of the agrarian sector of the economy.

 Enhancing the motivation of graduates to work in the specialty after receiving the diploma.

 Increasing the level of training graduates of schools, including rural ones, allowing future students to master innovative training programs.

 Reducing the classroom hours of teachers in order to free up time for research (primarily, together with students).

 Development of clear and long-term criteria for accreditation requirements for educational programs of agrarian universities and evaluation of teachers.

 Rural development, including social infrastructure.

 Enhancing the contact between science, education and production through the creation of regional educational clusters, uniting all parties interested in the quality of the educational process: universities, technical schools, vocational schools and large agricultural organizations using the latest production and management technologies that could become the basis for students' practical training and personnel development.

At present, strategic directions for the development of Russian agrarian education until 2030 have been developed on the federal level. They aim at modernizing the system of agrarian education, ensuring human capital growth in the agroindustry sector and sustainable development of rural areas to enhance food security and increase Russia's competitiveness in the global agri-food markets [Cherkasov, 2012].

The main strategic ways and conditions for the development of the Russian agrarian education are presented in Table 2.

Table 2.

No.	Ways of development of agrarian education	Conditions for the development of agrarian education
1.	Improving the content and technology of educational programs.	1) Ensuring standardization of basic professional educational programs, programs of disciplines, modules and practices, their compliance with the directions of development of the industry and rural areas, the requirements of professional standards and the labor market. 2) The formation of a life-long multi-level educational system, anticipating the development of modern technologies in the agro-industrial sector and corresponding to global trends in the development of agricultural production. 3) Providing graduates of educational organizations with the knowledge, professional skills and abilities necessary for the innovative development of all branches of the agro-industrial complex. 4) The development of universal and professional competences, the formation of students' values and attitudes for sustainable development and rational land use; 5) Training in practical work skills, including those with innovative techniques and technologies of the agricultural sector in the educational process; 6) Informatization and introduction of new learning technologies, improvement of educational management, ensuring a qualitative increase in the efficiency of the main operational processes of educational institutions.
2.	Development of the research potential of agrarian education.	1) The formation of the environment for generating new knowledge and conducting basic research for the purpose of advancing technological modernization of the agro-industrial complex.

		2) The continuity of generations of scientific and pedagogical workers capable of high-quality training of specialists at educational organizations and the formation of advanced scientific schools. 3) The integration of education and science, the involvement of students in research activities. 4) The creation of an innovative business environment for the production of applied scientific research, increasing the industrial demand for inventions. 5) The technology transfers in order to maximize the value added in the AIC.
3.	Ensuring effective investments in human potential in the AIC and sustainable rural development.	1) Enhancing the contact of educational organizations with agricultural enterprises in terms of educational content and requirements for graduates to master educational programs. 2) Leveling the structure of demand and supply pattern at labor markets of young specialists, taking into account the strategic development of the agro-industrial sector in a regional context. 3) Providing objective and reliable information about the possibilities of educational and professional trajectories in the agro-industrial complex, changing and popularizing the image of agrarian education. 4) The creation of modern systems supporting rural areas and farms in terms of educational, legal and business advice and training programs. 5) Ensuring the possibility of obtaining additional professional education and training in areas related to the agro-industrial complex for a wide range of population groups. 6) Qualitative increase of the professional level, social status and material welfare of teachers and employees of the system of agrarian education.
4.	Development of the system resource provision and expansion of the scope of persons and organizations interested in agrarian education.	1) Updating the material and technical base of educational organizations to ensure a high level of graduates' competencies. 2) Improving the efficiency of financial and human academic resources. 3) Expansion of social and corporate interaction with educational institutions and industry, including foreign ones. 4) Ensuring the interaction between the authorities and business on the implementation of long-term socio-economic development of the AIC. 5) Expanding the circle of stakeholders and organizations that provide expert, methodical, and resource participation in the development of agrarian education.

The implementation of the above challenges involves infrastructure support of research and technology transfer, as well as stimulating demand of the commercial sector for applied inventions of educational organizations. The implementation mechanisms may be:

- The organization of interuniversity centers of technology transfer in the field of agriculture on a competitive basis at the leading universities, providing patents, promotion of technologies to generate revenue from licensing, as well as interaction with enterprises.
- The development of a system for introducing innovative technologies through consulting centers for agricultural producers on the basis of agrarian universities.
- The organization of regional centers of incubation and innovation projects.
- The development of mechanisms of the state federal and regional support for small innovative enterprises at agrarian universities.
- The creation of inter-university project coordination centers (outsourcing of the tender documentation preparation, contract documentation and administrative support for applications and projects).
- The development of a system of subsidizing research and production activities of agrarian universities in agricultural production.
- The development of a system for subsidizing agricultural enterprises, depending on the amount of funds allocated by enterprises to carry out R & D by agrarian universities.
- The state support for agricultural producers in the implementation of innovative activities carried out together with agrarian universities.

Currently, within the framework of the support of the agricultural sector and the development of rural areas there are a number of targeted programs for graduates of agrarian universities, young professionals and small agribusinesses, participation in which creates advantages and unique opportunities for the development of entrepreneurship.

At the same time, these programs do not provide for the possibility of attracting the latest inventions and using the scientific potential of agrarian universities. Small enterprises that are badly in need of qualified professional support from specialized professionals also do not have the opportunity to receive it, because they do not have the possibility to pay permanent wages, and the number of subsidies received for production is limited and has a strictly targeted purpose.

The organization of outsourcing companies in the agroindustry complex, uniting qualified specialists of various professional orientations, can contribute to solving these problems. Such organizations can be created initially on the basis of universities, then they can also be private commercial enterprises. Outsourcing, which is the transfer of the performance of a task or process to a specialized external operator, has become widespread in industry and the service sector, since it allows an enterprise to concentrate on the most cost-effective types of activity and reduce costs [Korshunova, 2016].

According to experts, the most appropriate for large and medium-sized enterprises in the agroindustry complex is a mixed form of outsourcing, which involves several resources at once. For example, a program implemented by Wimm-Bill-Dann, in accordance with which it finances the technical re-equipment of dairy farms, which in exchange supply milk with specified characteristics at a fixed price. This model allows both participants of cooperation to get significant advantages. An outsourced company (food industry enterprise) gets the raw materials necessary for conducting its production activities, does not spend financial resources on building a vertically integrated company and focuses on core activities without going into agribusiness. An outsourcer (dairy farms) gets the opportunity to make technical re-equipment, which serves as a basis for increasing the efficiency of its activity, acts as a key to improving competitiveness and provides a guaranteed sales market.

The situation, when one resource clearly dominates in the activity of the outsourcer company, is understood as mono-resource outsourcing, for example knowledge outsourcing. Whereas in mixed outsourcing two or more resources have the same value. Knowledge outsourcing lies in the fact that

the corporate customer (outsourced) attracts an external executor (outsourcer - outsourcing company) to manage its assets or processes).

Experts believe that the use of outsourcing in the AIC could significantly increase its effectiveness. Historically, agricultural enterprises are significantly lagging behind the industrial ones and organizations of the service sector in terms of organizational development, modern equipment and the volume of investments. The introduction of outsourcing would allow agricultural producers without significant costs to get access to the resources they lack but outsourcers have. Agro firms demand services related to the performance of primarily non-core functions. This is especially true for the development of small businesses, micro-enterprises of the agroindustry complex and peasant farm enterprises

According to surveys of managers of agricultural enterprises, the most promising transfer to outsource is the transfer of the following functions: veterinary medicine, livestock technology, agronomy, selection, accounting and legal services. And this is not about attracting specialized companies to solve these tasks, but about singling out their specialized units as outsourcers.

On the other hand, large agricultural enterprises are gradually beginning to feel the need for more complex and, as a result, more profitable operations for the outsourcer, for example, in attracting an external management company for business restructuring and current management. The lack of outsourcers who are familiar with the specific needs of the agricultural economy is still very large, which slows down its introduction into the industry.

It is necessary to clearly distinguish managerial outsourcing from simple involvement of a consulting company to identify the causes of problems in the enterprise and develop a set of measures to eliminate them. We note that recently this service has also become popular in the AIC.

The problems of introducing outsourcing in the agro-industrial sector include: the unwillingness and reluctance of agricultural enterprises to abandon the independent execution of any processes due to the lack of confidence in the integrity of the operator; unwillingness to pay for external services, although, in the end, the use of specialized operators in most cases is cheaper (from a psychological point of view, their payment is more expensive than using their own "free" resources); the lack of an objective need for the services of external operators, since in order to use outsourcing it is necessary for the enterprise to operate in a highly competitive market, to have sufficient profitability and to strive to increase its competitiveness; in the case of Russian agriculture; this condition is not satisfied in most cases, many farms balance on the brink of survival, and they lack the organizational and financial resources necessary for the introduction of modern methods of managing expenses; the lack of operators adapting their services to the specific needs of agricultural enterprises (agriculture is characterized by low profitability and seasonality of work, which is not very attractive for outsourcers interested in a stable flow of orders and customer availability to pay for quality services - this problem largely follows from the previous one, as if agribusinesses were able to generate a stable effective demand for the services of specialized outsourcers, such ones would certainly appear) [Nechaev, 2015].

Thus, the creation of specialized outsourcing firms that combine highly qualified specialists of various profiles and possessing the necessary scientific potential seems to be an expedient and popular solution to the problems of the integrated development of the agricultural sector and agrarian education in modern conditions.

In addition to professional performance of duties of specialists of agricultural outsourcing companies established on the basis of universities based on contracts concluded with enterprises, the educational component can also be provided, and that is remote lectures and training programs in various agricultural areas that take into account the regional component of agriculture, followed by issuing

certificates to students. This method allows direct transfer of technologies to the agro-industrial complex.

Technology transfer is the process of transferring (selling, exchanging) scientific and technical knowledge and experience with the aim of providing scientific and technical services, applying technological processes or organizing the production of competitive products in accordance with market needs [Scanlon, et al. 2019].

The development of outsourcing companies on the basis of agrarian universities makes it possible to create additional conditions for students' qualitative study of disciplines and the solution of practical and scientific problems directly in production. Benefits for graduates of agrarian universities will consist in the possibility of implementing accumulated knowledge and continuous professional development in various industries, career opportunities, starting their own business and decent wages. As a result, this will contribute to an increase in the share of educational and industrial practices in the educational process, aimed at the development of professional competencies among future specialists.

CONCLUSIONS.

Currently in the world there are major changes in the education system. One of the factors that determines the processes of reorganization of the university model of education is globalization, affecting virtually all aspects of modern life, and the informatization of the educational process associated with innovative computer technologies.

The appearance of more progressive concepts, acquaintance with advanced experience of countries leading in the educational services market (USA, UK), and the development on this basis of a national model of education is aimed at solving the problem of demand in a market economy of a future specialist - university graduate, the effectiveness of the use of the knowledge gained and the mobility of his professional qualification in the modern times [Tarantey, 2017].

Of course, the formation of a young specialist takes place in higher school rooms and the labor-intensive process of training is based on teaching methods, the effectiveness of which determines the level of qualification of the future graduate. The traditional method involves the communication of the teacher and the student, the constant teacher's monitoring of the student's learning activities, the control of learning material mastering. The result of this dialogue depends on the correct solution of the following tasks:

- Setting a learning goal and the motivation for a student arising from it.
- The transfer of a certain material (lectures) and its interpretation for students (seminars).
- Knowledge control.

This training model is prescriptive. In the case of a directive model, the result of learning is regarded as the transfer of knowledge through the rational organization of the content of the educational process, when there is a one-sided dialogue, where the teacher acts as an active side. Practice shows that in the context of constantly changing requirements for the results of the educational process, the rapid development of information technologies, the needs of production for highly qualified specialists with the necessary knowledge, the use of only the traditional model of education in higher education is not enough.

A significant drawback of modern native agrarian education is the low level of employment of graduates in the chosen specialties. There is also a lack of practical orientation of the learning process at agrarian universities, disunity between educational organizations and agricultural enterprises, the low level of implementation of scientific and technological inventions. This situation is due to several reasons.

First, agricultural labor today is considered to be hard, not prestigious, and poorly paid. There are few graduates who want to work in the chosen specialty, but at the same time, according to statistical data, the need for single-subject specialists in agricultural enterprises is increasing.

Second, for economic reasons many agricultural producers (especially small and micro-enterprises) cannot include narrowly specialized specialists in their staff - livestock specialists, veterinarians, agronomists, economists, technologists, engineers. It results in the fact that some functions necessary for production are performed by workers who do not have special knowledge (or not performed at all), which negatively affects the efficiency of production in general.

Third, mechanisms for interaction between regional authorities, agrarian universities, agrarian scientific organizations and agricultural enterprises are absent or ineffective.

Based on the large historical experience in the development of agrarian education, modern problems that to some extent have a place in the implemented educational models of agrarian universities, the following suggestions seem appropriate:

1. For the effective implementation of an interactive model in the process of teaching students of agrarian universities one should use directive (mainly for lectures) and interactive (mainly for practical classes) methods to the same extent. An interactive learning model implies a high level of student autonomy and his ability for self-management, as well as a high level of pedagogical competence, initiative and technological literacy of the teacher.

2. In the modern conditions of the development of the market of educational services and the requirements of the era of information technologies, any field of teaching should combine the directive and modern, innovative, interactive teaching models in practice.

The main criteria for an interactive model of teaching at an agrarian university should be: the possibility of informal discussion of free presentation of the material; fewer lectures, but more hands-on activities; student initiative; the presence of group tasks requiring team effort; regular monitoring during the semester; an increase in the share of educational and industrial practices; the use of active, problem and contextual teaching methods.

3. To form an effective mechanism for the interaction of agricultural enterprises, profile educational organizations and graduates of agrarian universities it is necessary to create and develop companies that specialize in knowledge outsourcing in the agricultural sector.

The creation of outsourcing companies in the agro-industrial complex, bringing together qualified specialists of various professional orientations who can perform functions on a permanent contractual basis that are not characteristic of the main activity of the enterprise, will help to solve the problems of the separation of science, production and education.

Such organizations can initially be created on the basis of universities, and then private commercial enterprises will be added to them. The most promising is the transfer to outsourcing of the following functions: veterinary medicine, livestock technology, agronomy, selection, accounting and legal services.

The development of outsourcing companies on the basis of agrarian universities will create additional conditions for students to study disciplines in practice and solve professional and scientific problems directly in production. It will activate research activities in the agricultural sector and carry out direct transfer of technologies in the agro-industrial complex.

Benefits for graduates of agrarian universities will include the possibility of implementing the accumulated knowledge and continuous professional development in various industries, career opportunities, starting their own business and decent wages.

Thus, the proposed set of measures to improve the applied education technologies in agrarian universities and the formation of an effective mechanism for the interaction of agricultural enterprises, specialized educational organizations and graduates of agrarian universities will contribute to the development of agrarian education and the opening of new prospects for success in the lives of young professionals.

BIBLIOGRAPHIC REFERENCES.

1. Ajallooeian, E., Gorji, Y., & Niknejadi, F. (2015). Evaluate the Effectiveness of Social Skills Training through Group Therapy Play on Reducing Rational Aggression Boy Elementary School Student in Esfahan City. UCT Journal of Social Sciences and Humanities Research, 3(1), 1-4.
2. Akimzhano, T., Amandykova, S., Tleukhan, R., Daurembekov, Y., & Aykumbekov, N. (2018). Problems of applying and realization of preventive measures in the form of detention concerning persons, suspected and accused in the commission of the act of terrorism and crimes of extremist nature. Opción, 34(85-2), 800-823.
3. Arruabarrena, R., Sánchez, A., Blanco, J.M., Vadillo, J.A. and Usandizaga, I. (2019). Integration of good practices of active methodologies with the reuse of student-generated content. Intern. J. of Educat. Technology in Higher Education, 2019, 16(1) doi:10.1186/s41239-019-0140-7
4. Balin, A.V. (2014). The use of innovative methods in education. Young Scientist, 2014, 2 (61): 724-726.
5. Borovenskaya, I.Yu., Baklanova, N.A., Rotova, E.Yu. and Kotlarova, N.V. (2017). The his-tory of the development of education. Young Scientist, 2017, 24 (158): 350-352.
6. Buraeva, E.V. (2017). Agrarian education: place and role in the staffing of the agro-industrial complex. Herald of Agrarian Science, 2017, 6 (69): 101-107.
7. Buraeva, E.V. (2014). Prospects for the development of human resources in the agrarian sec-tor of the economy. Agrarian Science, 2014, 3: 4-5.
8. Cherkasov, M.N. (2012). Innovative methods of teaching students. Coll. Innovations in sci-ence. Proceedings of the XIV International Scientific and Practical Conference. No-vosibirsk, SibAK, 2012: 23-25.
9. Ingavale, D. (2013). An impact of advertisements on purchase decision of youth with reference to consumer goods. Advances in management, 3(1),18-22.

10. Korshunova, L.N. (2016). Agrarian education: problems and prospects. Economics of Agri-culture, 2016, 1: 33-37.
11. Maginga, T. J., Nordey, T., & Ally, M. (2018). Extension System for Improving the Management of Vegetable Cropping Systems. Journal of Information Systems Engineering & Management, 3(4), 29.
12. Maharani, I. P., & Subanji, S. (2018). Scaffolding Based on Cognitive Conflict in Correcting the Students' Algebra Errors. International Electronic Journal of Mathematics Education, 13(2), 67-74.
13. Nechaev, V.I. (2015). Problems of Agrarian Education in Russia. AIC: Economy, Manage-ment, 2015, 3: 26-32.
14. R, R., & M, S. (2017). Adapting domestic product within cultural migration in MALAYSIA. Humanities & Social Sciences Reviews, 5(2), 109-111. https://doi.org/10.18510/hssr.2017.526
15. Scanlon, E., Zamarripa Roman, B., Ibadlit, E. and Chini, J.J. (2019). A method for analyzing instructors' purposeful modifications to research-based instructional strategies. Inter-national Journal of STEM Education, 2019, 6(1) doi:10.1186/s40594-019-0167-2
16. Tarantey, V.P. (2017). Innovations in higher education: methodological and theoretical ap-proaches and their practical implementation. Journal of Belorussian State University. Journalism. Pedagogy, 2017, 2: 89-94.
17. Vdovina, S.A. and Vdovina, E.A. (2015). The quality of education as a pedagogical problem. Young scientist, 2015, 23 (103): 940-942.

DATA OF THE AUTHORS.

1. N.V. Byshov. Rector, Ryazan State Agrotechnological University Named after P.A. Kostychev (RSATU)

2. L.N. Lazutkina. Vice-Rector for Research, Ryazan State Agrotechnological Universi-ty Named after P.A. Kostychev (RSATU)

3. V.S. Konkina. Head of the Department of Marketing and Merchandizing, Ryazan State Agrotechnological University Named after P.A. Kostychev (RSATU)

4. M.A. Chikhman. Associate Professor, Department of Marketing and Merchandising, Ryazan State Agrotechnological University Named after P.A. Kostychev (RSATU)

5. O.A. Fedosova. Associate Professor, Department of Zootechny and Biology, Ryazan State Agrotechnological University Named after P.A. Kostychev (RSATU)

6. T.A. Starodubova Associate Professor, Department of the Humanities, Ryazan State Agrotechnological University Named after P.A. Kostychev (RSATU).

RECIBIDO: 6 de mayo del 2019. **APROBADO:** 17 de mayo del 2019.