

## Definition of The Peculiarities of the Agricultural Education in General Education institutions

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#### **ARSTRACT**

The purpose of this study is to construct a model of the development of the agricultural school in accordance with modern educational requirements ensuring the improvement of conditions, processes, and the content of agricultural education. Modern approaches to constructing the model of the organization of educational activities at agricultural schools have been provided; the purpose, directions and objectives of educational activities have been substantiated. The features of the model implementation have been studied along with the development of the draft state target program of the agricultural education development in the Republic of Sakha (Yakutia). The article summarizes the content of subprograms on the improvement of the content of agricultural education. The results of the study can be useful for agricultural schools in the development of exemplary basic educational programs forming an ethnic, regional, civic identity.

### **KEYWORDS**

agricultural schools, agricultural education, agricultural component, organization of educational activities, a teaching kit, the indigenous peoples of Yakutia, the federal state educational standard, an exemplary basic educational program, civil identity, regional identity, ethno-cultural identity, metasubject results of activities.

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### Introduction

The state-political and socio-economic reforms of the late 1980s – early 1990s had a significant impact on the Russian education in general and on the agricultural education in particular. "The agricultural education, which the state forced to fight for self-survival, largely ignored the actual needs of rural areas. This caused serious gaps in the system 'state – agricultural education – rural areas'. Ultimately, the strategic goals of the agricultural education implicate the solution of problems of rural areas, including laying the

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foundations for the sustainable socio-economic development of rural areas, ensuring a high quality of life of the rural population and national food security, staffing of the dynamic agro-industrial economy integrating into the world economy, which has a high competitiveness and investment potential" (Novikov, 2002).

Certainly, "the directors of many general education institutions search for the ways to improve the effectiveness of preparation of students for the agricultural work, trying to reproduce the experience of other schools, which is often impossible due to different conditions, or to develop their own model of working practice on an empirical basis. Pedagogy cannot provide them with substantial aid, as theoretically-methodological objectives of preparation of students for the agricultural work in the new socio-economic conditions have not been substantiated, a model of a graduate's labor activities in the agriculture industry and the general requirements to the labor training system have not been developed" (Pichugina, 2000).

The creation of agricultural schools in rural areas is currently of great relevance and significance for the sustainable development of not only rural areas, but also a district, republic, region, territory, country, the world as a whole. The development of the agro-industrial, i.e. agricultural sector, the traditional economy of the indigenous peoples of Yakutia, is vital to every person in making decisions on necessary and useful actions and operations for everyday life and in all situations.

"The recent crisis of traditional economies, caused by the commercial development of natural resources and related to the environmental disruptions, has led to an aggravation of social problems, a sharp decline in the employment of the indigenous peoples and consequently their standard of living" (Buldakova, 2010).

Certainly, the development of the traditional economy, i.e. the agricultural sector, depends on the quality of life of the rural population and their way of life, the social and personal development of every person including the ages of a baby, pupil, teenager and adult.

The agricultural school plays the main role in this process as an intellectual center of the village. The agricultural school as "a socio-cultural technology ensures the stability of society and its development" (Shabalina, & Boagi, 2013).

The nature of the development of the agricultural school, "a village school, is largely determined by the level of development of the agricultural sector of the locality where this school is located" (Gorelova, 2008). The main activities of the agricultural school in the territory of the Republic of Sakha (Yakutia) are directly linked with the traditional economic activities (horse breeding, reindeer herding, fishing, hunting, cattle breeding, arable farming) of the rural population.

The activities of the agricultural school are aimed at preparing a student for the appropriate use of the obtained knowledge and skills for the traditional agriculture and at improving the competitiveness of rural workers in the labor market, their ability to adapt to all life situations.

Territories, where the agricultural schools are situated, have their own characteristics: climate, permafrost, a certain geographical "feeding landscape" (Gumilev, 2003), sedentary, semi-nomadic (winter road, sayylyk) and nomadic ways of life, traditional farming.

In 2008, due to the testing and implementation of the federal state educational standard (hereinafter referred to as FSES) at schools of the republic and the country, village schools started to use in the learning content the curriculum and educational programs used by urban schools. As a result, the specific features of the rural life and labor have ceased to be reflected in the content of certain subjects with few exceptions. The family has separated from the school, the sense of unity of the rural school and the rural family, the village and its inhabitants is impaired. Upon the results of the FSES testing in 2011, amendments and additions, reflecting the peculiarities of upbringing, development and socialization of children have been made on the basis of moral and spiritual values of the peoples of the Russian Federation.

In this regard, village schools got a "second wind" for the variative school development, the variative education of students with the creation of the necessary conditions aimed at upbringing of the future land owner, his/her village, township, responsible for the current socio-economic conditions of the village and adhering to the tradition of the rural way of life.

For the implementation of the variative school development in rural conditions, new school types, agricultural schools, are established with an account of the socio-economic and socio-cultural conditions of the village, which apply modern innovative technologies of children upbringing, education and socialization with due regard to the traditional way of life, the traditional economic activities of such indigenous peoples as Sakha, Even, Evenki, Dolgan, Yukaghir, and Chukchi.

### **Methods**

- 1. The implementation of the model of the organization of educational activities based on the development of the draft state target program of the agricultural education development of the Republic of Sakha (Yakutia).
- 1.1. The Draft Basic Curriculum of the agricultural school in modern educational conditions.

The draft Basic Curriculum for the agricultural school of the Republic of Sakha (Yakutia) has been developed in order to provide all the best opportunities for getting a high-quality basic agricultural education and development of the abilities of school-age children. The curriculum of the agricultural school includes an invariant part, parts formed by the school community and extracurricular activities. In the invariant part, the agricultural component is divided into certain subjects as modules within the framework of school subjects, thereby forming a civil, regional and ethno-cultural identity (Figure 1).

At primary school, pupils study 5 days a week in Year 1 and 6 days a week in Years 2-4. Much attention is paid to Year 1, when the first propaedeutic agricultural knowledge is acquired. Hours per week in Year 1 do not exceed the maximum allowable study load in compliance with the FSES. The curriculum for Years 2-4 will be developed on the basis of the FSES.

At secondary school, the draft curriculum consists of the part formed by the school community. The main components of the agricultural components are the following subjects: Environment of Yakutia, Basics of Crop Production, Animal Husbandry, Processing of Agricultural Products, Agricultural Engineering,

Agricultural Economics, and Agricultural Law. The extracurricular activities will include Floriculture, Horticulture, Vegetable Production, Fodder Crops Classes and different forms of work such as agro-technological clubs: "Future Reindeer Herder", "Future Horse Breeder", "Future Stock-Breeder", "Future Grower", "Future Mechanic", "Future Hunter", the festival "In the United Family of Stock-Breeders", etc. School activities on official holidays in the Republic of Sakha (Yakutia), traditions, customs, ceremonies and family celebrations associated with the traditional way of life and traditional economic activities of indigenous peoples of Yakutia are held in the Republic of Sakha (Yakutia).

At senior school, the draft curriculum will include the following field-oriented subjects: Chemistry (Agricultural Chemistry), Biology (Agronomy), Technology (Tractor Driving), Physics and Agriculture. The curriculum is developed on the basis of the school subjects selected by students. It provides the practical study of the field-oriented subjects and is focused on the organization of research activities in agronomy, animal husbandry, the basics of entrepreneurship, horticulture, agriculture law, agricultural mechanization, and agricultural economics. Consulting hours in Years 9 and 11 include the preparation for exams on the basic school subjects – 1 hour per one subject: on the Russian Language, Russian Literature, Mathematics.

## 1.2. Teaching kits on the school subject "The world Around Us" for children of indigenous peoples in Yakutia

At primary school, the study of certain subjects (the World Around Us, Russian Language, Mathematics, Foreign Language, Native Language, Literary Reading, Native Literature, Fine Arts and Music, Technology, Physical Education, Culture of Indigenous Peoples of Sakha (Yakutia)) includes agricultural components in their content.

For today, for the primary school of the Republic of Sakha (Yakutia) a teaching kit "The World and My Native Land" (Fedorov, Fedorova, & Egorova) for Years 1-4 has been developed. It is designed for the subject "The World Around Us" based on the theory of learning activity. At the same time, the education is aimed at the activities of each student "for self-knowledge, changes in the self-concept and behavior. An access to these resources is possible in compliance with three conditions conducive to the creation of a specific facilitationary (facilitate means promote, contribute) environment, facilitating and enhancing the productive activities of a person" (Shakhmatova, 2006).

In our case, these conditions are as follows: "a congruent self-expression in communication, active empathic listening and understanding" (Shakhmatova, 2006).

The study of the teaching kit "The World and My Native Land" is aimed at education of love and respect for nature, your city, village, town, one's motherland, understanding of the personal experience of communication of a child with nature and people, understanding of one's place in nature and society, accustoming children to the rational comprehension of the world based on a deep emotional and value-conscious attitude to it.

A model of the teaching kit "The World and My Native Land" for the curricular and extracurricular activities, ensuring the formation in primary school students of a holistic view of the world with due regard to the civil, regional and ethno-cultural identity, has been developed. The model consists of

two components: basic and supplementary components, which include a variety of educational and methodological materials: an exemplary program, manuals, electronic materials, etc.

In the development of this model, the scientific and methodological approaches of the teaching kit aimed at the activities of each student, taking into account the integration of agricultural knowledge with the traditional economic activities of the indigenous peoples of Yakutia, have been identified.

A school subject "The World Around Us" is taught in an integral way in Years 1-4 two hours per week. The inclusion of the agricultural component, the study of the socio-natural (arctic, tundra, forest tundra, taiga, mountain taiga, alas, permafrost) and socio-cultural (lifestyle, traditional economy) features of the region with the integration of natural-science, environmental and agricultural knowledge, with due regard to the "national and universal values, the historical experience of centuries-old cultural traditions" is one of the tasks of this school subject (Darmenova, 2012).

Education "in terms of the student's maturity begins from the near to the far, from the known to the unknown" (Disterveg, 1956). This content allows to successfully and fully master the program of the school subject "The World Around Us". Lessons on the subject "The World Around Us" can be given in open spaces, at the premises of livestock farms, horse breeding bases, fishing areas, reindeer herds.

The teaching kit "The World Around Us" is permeated with the idea of the triad "Nature — Human — Society" integrating natural-science and environmental concepts in harmony with the folk wisdom. The proposed teaching kit is focused on new priorities of learning objectives, among which a developmental function of education is determinant. In the implementation of this function, a student from an object of the educational impact turns out to be a subject of his/her own activities, when a student performs his/her learning activities independently or together with other students and with the help of a teacher.

With the use of the activity approach to the study of the material, which is not delivered verbally and in a finished form, the children discover new knowledge and skills in the process of performing the independent learning, practical and research activities.

Starting from Year 1, children, independently or with the help of a teacher, use new ways of actions (senses, observation) for the opening of the new and unknown. At the same time, they observe the objects of animate and inanimate nature, explore the state of the objects and their change, and compare changes and links of the natural objects.

In Year 2, children solve a learning task independently through the use of the main way of learning the socio-natural environment – research. To solve the learning task each student makes his/her assumption and tests their hypothesis in research work.

In Year 3, the emphasis is upon the development of children's abilities to form the simplest explanatory hypotheses. In addition, in order to carry out research students independently use appropriate models and templates, which is a great achievement for them.

In Year 4, children solve a learning task independently, formulate hypotheses. During the research, they can repeatedly change the conditions of the experiment, expand and further develop it. Thus, the children actually learn to study. Further, based on the knowledge and skills obtained, primary school students make up the algorithm. In solving the learning task, students conduct self-examination and self-assessment of knowledge and skills obtained through the independent research work.

Primary school students master a new way of actions – a project method. Students systematize and generalize project results in the form of simple models, charts, drawings, crafts, making up riddles, tales, short stories, writing essays.

Thus, the teaching kit "The World and My Native Land" is focused on increasing the level of children's knowledge and enriching their practical experience. Working independently, students are immersed in various activities; they acquire knowledge and skills on their own. As a result, primary school students assess their knowledge and skills, and use them in solving various practical tasks.

In the context of the modernization of school education for the civil, regional and ethno-cultural education in the multicultural environment and for the quality training of students, the primary school expanded the scope of activities in the study of the school subject "The World Around Us" with the further development of the functions of the native (Yakut, Even, Evenk) language.

Within the framework of the joint project of the UNESCO Moscow Office and the Ministry of Education of the Republic of Sakha (Yakutia) on promoting the development of nomadic schools, a teaching kit "Tulalyyr Eyge" (Fedorov, Nikitina, & Stepanova) for nomadic schools of the Republic of Sakha (Yakutia) has been developed and published. "The developed teaching kit "The World Around Us" is translated for nomadic schools to the Even (translated by Stepanova), Evenk (translated by Myreeva) and Russian (translated by Vasileva) languages of study" (Fedorov, 2009).

In order to test the teaching kit "Tulalyyr Eyge" upon the joint project of the UNESCO Moscow Office and the Ministry of Education of the Republic of Sakha (Yakutia) "Promoting literacy in school children of the indigenous peoples by consolidating the potential of the community education system among the nomadic peoples of the north of the Republic of Sakha (Yakutia)", expeditions to the Ulakhan-Kyuelskaya permanent nomadic Dolgan school (Tuprina D.I.), the Anabar ulus, the Evenk nomadic school of the "Cheroda" community (a teacher Bagaeva P.P.) have been organized.

## 1.3. Teaching kit "Traditional Farming" for Years 1-4 for extracurricular activities

The section of the optional part "Extracurricular activities" will allow to fully comply with the requirements of the federal state general education standards. The agricultural schools implement supplementary educational programs, a program of pupils' socialization, and educational programs during the extracurricular lessons in the basic curriculum.

The organization of lessons as part of the "Extracurricular activities" is an integral part of the educational process at school. General education institutions provide students with the opportunity to select a wide range of activities aimed at the development of a student.

In order to "transfer the social experience to the younger generation" (Zholdubaeva, 2012), cultivate a sense of respect for the native alas, work, farmers, skills of work in rural areas, form an interest in research activities

starting from the younger school age, a school subject "Traditional Farming" has been developed for pupils of Years 1-4 (Fedorov, Ptitsyna, Osipova, Tastygina, & Bugaeva) at agricultural schools in the Republic of Sakha (Yakutia) in accordance with the requirements of the up-to-date general education.

The content of the teaching kit includes natural environment and climatic (habitat, harsh winter, permafrost), landscape (tundra, forest tundra, mountain taiga, taiga) features of the region, the way of life (traditional farming, traditional knowledge, traditions, customs, rituals) of the indigenous peoples of Yakutia. The content of the teaching kit makes students perform useful things for the family, school and society, "accept spiritually-moral, social, family and other values" (Kozlova *et al.*, 2009).

The fundamental principles of the teaching kit "Traditional Farming" are as follows:

- The principle of activity the students will "perform personal, regulatory, cognitive and communicative universal educational actions as the basis of learning to study" (Savinov, 2010) in the course of their own activities or the direct activities of a teacher or an adult (a parent, a tutor);
- The principle of variability upbringing of pupils who can choose and maintain their position independently;
- The principle of psychological compatibility the creation of the ideas of cooperation pedagogy, friendly attitude to students, the development of communication in a group, among colleagues;
- The principle of creativity the acquisition of own experience during lessons, extracurricular classes, extra-curricular activities, the practical implementation of the projects created by children;
- The principle of conformity to natural laws, i.e. the maximum proximity of a child to nature, which is based on a way of life, economic activities, unique culture, traditions, spiritual and moral values of the people, "on the use of the knowledge and experience of students and teachers" (UNESCO, 2003).

Teaching methodology of the teaching kit "Traditional Farming" is an activity that is organized in a joint interaction of children and adults in the family, at school and in society with the use of various forms, methods and work methods associated with the cattle and horse breeding, fishing, hunting, reindeer breeding, agriculture, ensuring the formation of certain personal, metasubject and subject activity results. The teaching kit "cultivates not the love of labor, but forms the need for labor and a compulsory habit to work as a basis for the future happiness of our child" (Pichugina, 1998).

The subject "Traditional Farming" includes the study of traditional economic activities of indigenous peoples of the North and consists of the following modules: "Animal Breeding", "Horse Breeding", "Reindeer Breeding", "Hunting", "Fishing", "Foraging", "Crop Production", and "Clothing". Each module includes informative and practical units.

An informative unit of the teaching kits represents a number of topics related to the study of nature — alaas, cattle camp, horse and reindeer breeding routes, pastures for cattle and horses, hunting and fishing lands, gardens and field areas at the schoolyards — all these topics integrate scientific, agricultural, environmental and traditional knowledge.

A practical unit is aimed at the formation of the specific socio-cultural competencies required for workers engaged in animal and reindeer breeding,

hunting, fishing, foraging, crop production, clothing manufacture (in case of self-guided and group types of work). **Results** 

## 2. The model of the organization of educational activities at agricultural schools with due regard to the regional and ethno-cultural identity.

### 2.1. Modern approaches to the construction of models of the organization of educational activities at agricultural schools.

The modern agricultural school is closely connected with the life, the child's life activities, curricular, extracurricular and out-of-school activities. "This can be a cooperative labor of the adult and the child in traditional farming" (Fedorov, 2013).

Certainly, in order to create a new type of school, an agricultural school meeting new educational requirements in the conditions of rural areas, it is necessary to apply modern approaches to the construction of a model of the organization of its educational activities.

Firstly, the education is focused on vital issues – on the agricultural education – the revival, preservation and development of traditional farming, the formation of traditional values in students - patriotism, social solidarity, citizenship, family, labor and creativity, nature and humanity, certain universal educational actions in order to perform them in everyday life and in any situations – this is an axiological approach. Secondly, the educational activities are oriented to traditional farming, activities of a student, which imply the acquisition of propaedeutic agricultural knowledge, careful attitude to nature, soil, work and active participation in the socio-economic development of rural areas - this is a system-activity approach. Thirdly, the comprehensive organization of curricular, extracurricular and out-of-school activities at agricultural schools, focused on pedagogic functions of education, the transformation of the secondary school into the agricultural school - a social and cultural center of the village – this is a culture-congruent approach. Fourthly, the organization of curricular, extracurricular and out-of-school activities at agricultural schools, aimed at the study of the interrelation of nature, man, society and the integration of scientific, agricultural and ecological knowledge, labor, the establishment of inter-subject relations and the formation of personal, meta-subject and subject activity results - this is an integrative approach. Fifthly, the focus on an innovation, educational cluster aimed at creating a common educational space of continuous agro-technological education at secondary schools on the basis of the Council of Agricultural Schools Union of the Republic of Sakha (Yakutia)) with the involvement of the ministries, departments, educational and scientific institutions, government and public institutions for further positive development – this is a cluster approach. "Clusters are aimed at consolidating the efforts of "local" players (representatives of business, scientific and educational community, business associations, etc.) in the development and implementation of joint projects" (Abashkin et al., 2012), as well as at the provision of the resources of agricultural schools and its improvement.

A student, the owner of the land where he lives, plays the main role in the model of the agricultural school development.

Modern approaches to the organization of educational activities are making fundamental adjustments to the curriculum and school subjects at agricultural schools, which provide the construction of the educational process on the basis of "inclusive education with the purpose of formation of competencies stipulated by the basic educational program" (Borisova, 2014), in our case, the education included in the activities. In content and technological terms, the presented approaches allow to implement a student's social adaptation to the modern conditions in rural areas in the process of self-guided practical, research and project activities.

### 2.2. The purpose, directions and objectives of the model of the organization of educational activities at agricultural schools

In order to support the agricultural schools at the regional level, it is necessary to construct a model of organization of educational activities ensuring appropriate conditions for upbringing, education and socialization of the future owner of land complying with the modern socio-economic conditions of rural areas in view of the traditional farming of the indigenous peoples of Yakutia.

In this context, the purpose of creating a new model is to develop the continuous agricultural education in accordance with modern purposes, objectives and requirements, ensuring the improvement of conditions, processes, content of the agricultural education based on modern approaches, aimed at the formation of the civil, regional and ethno-cultural identity in view of the traditional farming of the indigenous peoples of Yakutia.

To achieve this purpose, the following directions have been indicated:

- the study of the needs and requests of the village community in the establishment and support of agricultural schools, the formation of proposals for the development of an exemplary basic educational program (hereinafter EBEP) for agricultural schools in accordance with the requirements of the FSES;
- promotion and improvement of conditions for receiving the high-quality agricultural education with the development, first of all, the EBEP for primary, secondary and senior schools within the FSES implementation. Secondly, the development of teaching kits in accordance with the requirements of the FSES and with due regard to particular characteristics of agricultural schools;
- creation of the up-to-date agricultural education with the latest resource provision on the basis of clustering.

The decision-making on the mentioned approaches, objective and directions of the model of the organization of educational activities at agricultural schools implies the implementation of the following challenges:

- to create an interagency commission within the Council of the Agricultural School Union of the Republic of Sakha (Yakutia) with an additional attraction of the state, municipal and public authorities, institutional, educational and scientific institutions for further preservation and development of agricultural schools;
- to organize the conditions for social protection, strengthening and modernization of the material-technical, personnel, scientific and methodological bases of agricultural schools of the Republic of Sakha (Yakutia) in order to use them for the organization of educational activities with an additional investment and with the assistance of members of interdepartmental commissions;
- to improve the content of the agricultural education by creating optimal conditions for the development of practical, research and project activities of a

student through the integration of scientific, agricultural and ecological knowledge with due regard to the socio-cultural, socio-natural peculiarities of the region with the use of different forms of the education activities (curricular, extracurricular and out-of-school activities);

- to arrange for the cooperation with the state, municipal and educational institutions, organizations of different levels and the subsequent development of agricultural production cooperatives, summer and winter production centers, summer agricultural and agro-ecological camps, scientific communities of students, etc.;

- to develop an exemplary basic educational program with due regard to the specificity of agricultural schools, a Basic Curriculum, teaching kits on the main subjects: a subject "Traditional Farming" for primary school, subjects "Basics of Livestock Production", "Basics of Crop Production", "Agricultural Economics", "Agriculture Mechanization", "Processing of Agricultural Products" for secondary school, as well as on the field-specific and elective courses with agricultural components at senior school with due regard to the civil, regional, ethnic and cultural identity.

### Discussion

- 3. The draft state target program of the development of the agricultural education system in the Republic of Sakha (Yakutia).
- 3.1. The draft state target program of the development of the agricultural education system in the Republic of Sakha (Yakutia).

To implement the presented model, a draft state target program of the development of the agricultural education system of the Republic of Sakha (Yakutia) has been developed to improve its conditions, processes and content.

On October 14, 2014, a draft state target program of the development of the agricultural education system of the Republic of Sakha (Yakutia) was brought up for discussion by the Council of the Agricultural Schools Union of the Republic of Sakha (Yakutia) with the participation of representatives of educational institutions, the Ministry of Education of the Republic of Sakha (Yakutia), the Ministry of Agriculture and Food Policy of the Republic of Sakha (Yakutia) and the people's deputies of the State Assembly Il Tumen of the Government of the Republic of Sakha (Yakutia). During the discussion, the following subprograms have been proposed to be developed in accordance with the requirements of the modern education:

The First Subprogram. An exemplary basic educational program in the agricultural schools with due regard to the civil, regional and ethno-cultural identity.

The Second Subprogram. The development of educational materials (subjects and special courses, modular, field-specific, elective courses) in accordance with the requirements of the modern education.

The Third Subprogram. Resource provision of agricultural schools of the Republic of Sakha (Yakutia).

# 3.2. Brief description of the draft state target program of the development of the agricultural education system in the Republic of Sakha (Yakutia).

Let us consider the description of each subprogram:

The First Subprogram. An exemplary basic educational program in the agricultural schools with due regard to the civil, regional and ethno-cultural identity.

It implies the development of an exemplary basic educational program (hereinafter – EBEP) for the first stage of the agricultural school. The EBEP includes target and organizational components.

The target component includes the planned results of the development of the course "Torut dyaryk" for Years 1-4 (Fedorov, Ptitsyna, Osipova, Tastygina, & Bugaeva) for the agricultural schools of the Republic of Sakha (Yakutia) in accordance with the requirements of the Federal State Educational Standard aimed "not only at the information transfer, but also at teaching how to apply the information" [Sherstobitov, 2009]. In addition, the system of the assessment of the achievement of the planned results of the development of an exemplary basic educational program for Years 1-4 on the subject "Traditional Farming" has been developed for the agricultural schools of the Republic of Sakha (Yakutia).

For the second component, a draft Basic Curriculum of the Primary Education for agricultural schools of the Republic of Sakha (Yakutia) has been developed for the purpose of forming the civil, regional and ethno-cultural identity.

The Second Subprogram. The development of the teaching kits (subjects, special courses, modular, field-specific, elective courses, terminological dictionaries for animal husbandry, horse breeding, horticulture, herding, fishing and hunting) in compliance with the general education FSES.

For primary school, it is planned to develop modular courses on specific subjects with the agricultural component (Russian Language, Literary Reading, Mathematics and Computer Science, the World Around Us, Foreign Language, Basics of the Intellectual and Ethical Culture of the Peoples of Russia, Art, Music, Technology, Physical Education).

The Secondary School EBEP has been developed for educational institutions. The planned results of the acquisition of the basic educational program of the compulsory education on the subject "Basics of Livestock Farming" have been developed (Fedorov, Chugunov, & Arzhakova) subject to "pedagogically well-arranged production and research activities of students" (Orlova, 2008). The planned results of the introduction of a subject "Basics of Livestock Farming" for secondary school are being elaborated.

At secondary school, the basic subjects of the agricultural education will be developed with allocation of hours of the part formed by the school community: Basics of Crop Production, Animal Husbandry, Processing of Agricultural Products, Agricultural Engineering, Agricultural Economics and modular courses on specific school subjects with the agricultural component (Biology, Chemistry, Russian Language, Literature, Foreign Language, Second Foreign Language, Health and Safety, History of Russia, World History, Social Studies, Geography, Mathematics, Algebra, Geometry, Information Technology, Physics, Art, Music, Technology, Physical Education).

The extracurricular activities will include Floriculture, Horticulture, Vegetable Production, Fodder Crops Classes and different forms of work such as agro-technological clubs: "Future Reindeer Herder", "Future Horse Breeder", "Future Stock-Breeder", "Future Grower", "Future Mechanic", "Future Hunter", the festival "In the United Family of Stock-Breeders", etc. School activities on

official holidays in the Republic of Sakha (Yakutia), traditions, customs, ceremonies and family celebrations associated with the traditional way of life and traditional economic activities of indigenous peoples of Yakutia are held in the Republic of Sakha (Yakutia).

At senior school, the following field-oriented subjects will be included in the curriculum: Chemistry (Agricultural Chemistry), Biology (Agronomy), Technology (Tractor Driving), Physics and Agriculture.

- **3 subprogram**. On the basis of the cluster approach, the plan of resource provision of agricultural schools will be developed:
- legal and regulatory framework (decrees, orders, resolutions, laws, regulations, charter):
- logistics: the allocation of land and water areas: pasture, hay, hunting, fishing areas, the creation of fishing cooperatives, livestock farms, horse breeding, reindeer breeding farms and greenhouse, horticulture, horticultural farms, etc.
- to enter into cooperation with the state and municipal educational institutions, organizations of various levels with the investment and further creation of agricultural production cooperatives, summer and winter production facilities, summer agro-ecological camps, scientific communities of students, etc.

To improve the material and technical base in the agricultural schools, the agricultural production cooperatives (hereinafter referred to as "APC") must be established.

Agricultural schools located in the vast territory of the North and Arctic Regions have advantages in terms of land allocation (reindeer pastures, hunting and other lands).

Staffing of the agricultural schools is appointed by means of selection of primary school teachers, subject teachers, educators (social worker, psychologist), supplementary education teachers, technical personnel, as well as the involvement of agricultural specialists, farmers and farms workers.

### Conclusion

In summary, it must be emphasized that a model of the agricultural education development by conceptually strategic approaches, objectives and directions, tasks, draft programs and sub-programs is important for its long-term development and effective creative work in the agricultural schools of the North and the Arctic, in particular in the Republic of Sakha (Yakutia), Russia and all over the world.

The complex solution of the agricultural education tasks through the development of the draft state target program at agricultural schools and their use in the organization of educational activities allow to conclude about the positive results of the developed draft program with due regard to the civil, regional and ethno-cultural identity.

However, the author of the article has not managed to develop teaching kits with the agricultural components on separate subjects, field-specific and elective curricula for the primary and senior school as a consequence of this direction of the future research prospects. Thus, the further work on this topic shall be required. This will allow to develop this study and consider it as one of the top options in the multinational, multicultural environment of the republic, the country and the world.

### References

- Abashkin, V.L., Boyarov, A.D., & Kutsenko, E.S. (2012). Klasternaya politika v Rossii: ot teorii k praktike [Cluster Policy in Russia: From Theory to Practice]. Foresight, 6(3), 17.
- Borisova, A. (2014). Vklyuchennoe obuchenie chto eto? Kak eto? A vot tak... [Exchange Education What Is It? How's That? That's How...]. Gazeta Ivanovskogo gosudarstvennogo khimikotekhnologicheskogo universiteta "Khimik", 3(2089).
- Buldakova, V.G. (2010). Obshchina kak faktor razvitiya natsional'no-etnicheskikh obshchnostey [The Community as a Factor of the Development of National and Ethnic Communities]. Bulletin of the North-Eastern Federal University named after M.K. Ammosova, 7(4), 89.
- Darmenova, R.A. (2012). New Technologies in the Organization of Labor Training According to National Circumstances. International Journal of Experimental Education, 12, 12-14.
- Diesterweg, F.A. (1956). Rukovodstvo k obrazovaniyu nemetskikh uchiteley [Guide to German teachers Education]. In F.A. Diesterweg, Izbrannye pedagogicheskie sochineniya [Selected Pedagogical Works] (pp. 55-208). Moscow: State Pedagogic Publishing House of the Ministry of Education of the RSFSR.
- Fedorov, G.M. (2009). Tendentsiya razvitiya estestvennonauchnogo i ekologicheskogo obrazovaniya Respubliki Sakha (Yakutiya) [The Trend of Development of Science and Environmental Education of the Republic of Sakha (Yakutia)]. The success of modern science, 11, 58.
- Fedorov, G.M. (2013). Vospitaniya i sotsializatsiya detey, prozhivayushchikh s roditelyami, vedushchimi traditsionnoe khozyaystvo [Upbringing and Socialization of Children Living with Their Parents Engaged in Traditional Farming]. Diskussiya, 11, 120-125.
- Gorelova, S.A. (2008). Obrazovanie shkol'nikov v kontekste sel'skogo sotsiuma [Education of Students in the Context of Rural Society]. Izvestiya Rossiyskogo gosudarstvennogo pedagogicheskogo universiteta imeni A.I. Gertsena, 88, 183.
- Gumilyov, L.N. (2003). Etnogenez i biosfera Zemli [Ethnogenesis and Biosphere of the Earth]. Moscow: Ast.
- Kozlov, V.V., & Kondakova, A.M. (Eds.). (2009). Fundamental'noe yadro soderzhaniya obshchego obrazovaniya [The Fundamental Core of the Content of the General Education] (p. 9). Moscow: Education.
- Novikov, V.G. (2002). Nepreryvnaya mnogourovnevaya sistema agroobrazovaniya kak faktor sotsial'no-ekonomicheskogo razvitiya rossiyskogo sela [Continuous Multi-Level System of the Agricultural Education as a Factor of Social and Economic Development of Russian Rural Areas]. Education and Personnel Policy, 1, 57.
- Orlova, M. (2008). "Agroshkola": Putevka v zhizn' ["Agricultural school": Start in Life]. Narodnoe Education, 10, 90-99.
- Pichugina, G.V. (2002). Didakticheskie osnovy adaptivnoy sistemy tekhnologicheskoy podgotovki shkol'nikov k sel'skokhozyaystvennomu trudu: diss. ... doktora ped. nauk [Didactic Bases of the Adaptive System of the Technological Preparation of Pupils for Agricultural Work (Doctoral Thesis)]. Moscow.
- Pichugina, G.V. Agroshkola-internat kak vospitatel'naya Sistema [The Agricultural Boarding School as an Educational System]. In E.I. Sokolova, & N.L. Selivanova (Eds.), Gumanisticheskie vospitatel'nye sistemy vchera i segodnya (v opisaniyakh ikh avtorov i issledovateley) [Humanistic Educational Systems Yesterday and Today (in the Descriptions of Their Authors and Researchers)]. Moscow: Russian Pedagogical Society.
- Savinov, E.S. (Comp.). (2010). Primernaya osnovnaya obrazovatel'naya programma obrazovatel'nogo uchrezhdeniya. Nachal'naya shkola [Exemplary Basic Educational Program of an Educational Institution. Primary School] (p. 43). Moscow: Education.
- Shakhmatova, O.N. (2006). Pedagogicheskaya fasilitatsiya: osobennosti formirovaniya i razvitiya [Pedagogic Facilitation: Features of Formation and Development]. Research in Education, 3.
- Sherstobitov, S.I. (2009). Reformirovanie sistemy obrazovaniya [Reformation of the Education System]. Bulletin of Kharkiv National Automobile and Highway University, 45, 10-13.
- Shabalina, E.P., & Boagi, N.M. (2013). Peculiarities of Education in Folk Pedagogy. European Journal of Natural History, 4, 27-30.
- UNESCO. (2003). Education in the Multilingual World. Paris.
- Zholdubaeva, A.K. (2012). The Education in the Context of Culture. International Journal of Experimental Education, 12, 12-14.