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DESIGN OF A DEVELOPING SPEECH ENVIRONMENT USING
NATIVE LANGUAGES OF INDIGENOUS MINORITIES

Vilena Yakovlevna Unarova (a)*

*Corresponding author

(a) Federal State Budgetary Scientific Agency "Scientific Research Institute of National Schools of the Republic of Sakha (Yakutia)", Republic of Sakha Yakutia, Yakutsk, Russia, vilena-86@mail.ru

Abstract

The article presents the results of research on education of indigenous peoples of the North, Siberia and the Far East of the Russian Federation. The native languages of small indigenous peoples are under threat of extinction. The problem of teaching languages is due to the fact that schoolchildren do not know their ethnic language, and native language teaching in educational organizations is not successful due to the lack of a speech environment. One of the ways to develop, support and preserve the native language and improve its school status is a developing speech environment in the native language within schools. All participants in educational relations, including parents and teaching staff, should be involved in the process of its creation. Based on the study of scientific literature, regulatory documents, information and analytical data, Internet resources on native languages of indigenous peoples, as well as distance surveys of school managers, the schools were divided by functions of native languages; the concept of a developing speech environment was specified and a developing speech environment model was designed. The model consists of three important components, including invariant and variable elements classified in accordance with the types of schools, where native languages perform different functions. The results obtained can serve as the basis for the development of a didactic system aimed at activating, stimulating and developing students' motivation to master their native (ethnic) language, develop speech and communicative skills in the conditions of the limited functions of the native language in society.

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Keywords: Native (ethnic) language, indigenous peoples, developing speech environment, classification of schools, participants in educational relations



1. Introduction

According to UNESCO, over 40 % of the world languages are on the brink of extinction. 2019 was declared the International Year of Indigenous Languages, left behind a “train” of events that had a positive impact on the native languages of the world's peoples – their development, support, preservation and revitalization. The International Decade of Native Languages of Indigenous Peoples (2022-2032) keeps a positive trend.

According to the Unified List of Indigenous Minorities of the Russian Federation No. 255 of March 24, 200, 47 indigenous minorities live in Russia, numbering more than 300 thousand representatives, of which 40 belong to the indigenous minorities of the North, Siberia and the Far East. According to the federal monitoring conducted by the Institute for the Development of Native Languages of the Peoples of the Russian Federation created in 2019, in the 2018–2019 academic year, 27 languages of indigenous peoples were studied in educational institutions of 19 regions of the Russian Federation.

The native languages of the indigenous small-numbered peoples of the North, Siberia and the Far East of the Russian Federation (hereinafter, the indigenous peoples of the North, IPN) occupy a special place in the education system due to the "constraint" of teaching. The study of native languages of the indigenous peoples is the study of ethnic languages, which are not spoken as native speakers of the titular peoples, for example, Tatars, Bashkirs, Yakuts, etc. Minority languages of small ethnic groups have unequal opportunities in the educational sphere: they are not studied in preschool organizations, a sufficient number of teaching hours are not allocated to study them at schools, although the problem of vitality began to concern even the languages of the largest peoples, numbering over one million and over 500 thousand people who are protected at the legislative level (Kondrashkina, 2020).

It is known that the tangible process of linguistic assimilation and loss of the native language by the indigenous peoples of the North began in the late 1980s. At present, representatives of the older generation mainly use their native languages. The last two generations are already close to the total loss of their native languages. By analyzing the life cycle of some languages the Breton language in France, the Assyrian language in Russia), it was revealed that the complete loss of the native language can occur already in the fourth generation (Muradova, 2008). Despite the positive trend and growing ethnic self-awareness, ethnic self-identification and native languages of the indigenous minorities do not coincide. The language shift is towards the Russian language. For a short historical period, the once "living" languages have passed into the state of languages disappearing from the earth, and the natural linguistic continuity of generations has been disrupted.

2. Problem Statement

The "constraint" effect in teaching the native languages of indigenous peoples in educational organizations is due to a number of factors reflecting the historical transformation and the current state of languages of the national minorities. Among the main problems and barriers faced by these peoples in the field of education are the lack of native teachers and teachers of native languages, their professional training; shortage of children in classes; incomplete immersion in the language environment (lack of language support outside the classroom, school, in the family and in the countryside); a low level of

motivation and educational needs in the study of native languages (children, parents, teaching staff, school management); shortage of teaching aids, as well as scientific schools involved in the development of teaching aids; undeveloped methods of teaching the native (ethnic) language based on the methods of teaching foreign languages; the uneven distribution of teaching hours in "Native Language" and "Native Literature" in variable curricula and the irrational arrangement of language priorities in schools; the lack of experience in the use of effective traditional and innovative technologies, forms and methods of teaching in Russia, etc.

The present article focuses on the problem field, which is of particular relevance, since it has not yet been studied in Russia and requires a scientific approach to the solution. This is the lack of a language environment and low motivation to learn the native language. These two problematic components are interdependent: if there is no language environment, there is no motivation to learn the language; if there is no motivation, there is no language environment. The mission of the education system is to provide high-quality support for the native language in society, assistance in the transmission of the language to the younger generations, the development of linguistic personality of students who speak their native language, identify themselves as part of a multinational Russian society and a representative of a particular people.

Currently, in schools there is no language support outside classes, which causes difficulties in solving the problems of language education. One of the important measures for the development, support and preservation of native languages of the indigenous peoples of the North is the creation of a developing speech environment (DSE) in schools located in places of traditional residence whose number prevails in rural settlements. This area of environmental pedagogy covers both general educational and preschool organizations, all participants in educational relations, and takes into account different degrees of knowledge of the native (ethnic) language, various educational activities (academic subjects, elective course, elective courses, additional education) and resources of rural schools that can be used in creating a special environment.

3. Research Questions

The subject of the research can be described in terms of the conceptual apparatus, prerequisites and conditions for creating a DSE in native languages, as well as a model for creating a DSE in schools located in places of traditional residence of the IPN.

3.1. Conceptual apparatus

The theoretical analysis of scientific literature helped us to understand that in modern science there is no unambiguous interpretation of the concept of a developing speech environment, its nature and structure. There are no works on the languages of the indigenous peoples. The concept of developmental environment is used when describing the educational environment at the level of preschool education. There are concepts of language / speech environment dedicated to the problem of teaching a foreign language. At the same time, there is no clear distinction between these terms. For example, the linguistic dictionary offers the following definition: speech (or linguistic) environment is speech that a person perceives in natural conditions: language of the family, radio, television, books. An artificial speech

environment can be created in classrooms for educational purposes, and the closer it is to the natural conditions, the more successfully the teacher will be able to use the developing potential of the speech environment (Zherebilo, 2010).

Our basic term "developing speech environment" is found in the work by Fedorenko (1984). The project on the DSE developed by Bagge (2015, 2016) was implemented in school practice. The researcher considers the school as a DSE and defines this concept as a developing speech environment (the term suggested by Fedorenko (1984)) that stimulates speech communication, an environment in which the potential does not develop spontaneously, but has a planned and consistent nature, directs communicative activities (Bagge, 2015), it is an active speech environment, limited by ethical, literary and linguistic norms. The developing speech environment is considered as a condition for the full-fledged formation of students' thinking and personality (Bagge, 2016).

The author singled out as the following DSE components: the educational program, educational technologies, extracurricular work and interaction with external institutions. Her idea of creating a DSE as a means of increasing motivation in the study of the Russian language by foreign children is based on the systematic approach to the environment including activities of all subjects of the educational process, which contributes to their intellectual and general cultural development, preserving the attitude to native speech as an absolute value (Bagge, 2015).

The conceptual and methodological basis of the research is based on the theory of the developing potential of speech environment by Fedorenko, the scientific approach developed by Bagge, DSE modeling (Yasvin, 2012), the school structure school (Tubelsky, 2007) and key principles of the metalanguage approach to learning the languages developed by Unarova and Hamraeva (2018).

3.2. Types of schools

Both the general state of language and the sociolinguistic situation in a region affect the functions of the native language in schools. The representatives of the indigenous peoples of the North can be divided according to the degree of their ethnic language proficiency into those who speak their native languages (mainly the older generation), those who are not fluent in their native languages (mainly the middle generation) and those who do not speak their native languages (mainly young people and children).

Taking into account the state of languages, including their writing, the non-equilibrium linguistic situation in the regions and functions of languages in schools, two classifications were suggested. The classifications are based on analytical materials from the collection of the First All-Russian Congress of Teachers of Native Languages, Literature and Culture (Lekhanova et al., 2017), the classification of languages of the indigenous peoples of the Russian Federation (Pustogacheva, 2014), data from the All-Russian census of the Russian Federation, the assessment of the state of languages in the interactive Atlas of Endangered Native Languages (Moseley, 2010), the study and analysis of federal and regional laws, Internet resources, public reports of the heads of institutions dealing with indigenous languages issues, and the content of official websites of educational organizations. They took into account the following quantitative and qualitative indicators: a) classification of languages of the indigenous peoples: the number of representatives of the indigenous peoples; the status of indigenous languages as languages of education; the presence of writing languages, dialects, etc.; b) division of the Russian regions into four

federal districts (Far Eastern, Siberian, North-Western and Ural federal districts): the number of native speakers in a region; the number of educational organizations and students learning their native language; availability and degree of regulatory support, state support; provision of teachers with methodological tools; availability of Internet resources in native languages, scientific schools, institutions of additional education; implementation of innovative regional projects, etc.

On the basis of two auxiliary classifications, it was necessary to divide schools by the functions of their native languages and conduct a remote survey of school managers. The criteria for the selection of schools were those that were proposed in the preliminary classifications. Based on the results of the distance survey, it was required to adjust some criteria and indicators and identify the types of schools for creating a DSE.

3.3. Designing a model for creating a DSE

By specifying the conceptual apparatus, as well as classifying schools, it becomes possible to build a strategy for creating a DSE in native languages and designing its model. The strategy is to take into account the types of schools according to the functions of the native language, because they depend on the abilities of the educational organization, taking into account the legislation. According to paragraph 4 of Art. 14 of the Federal Law "On Education in the Russian Federation" of December 21, 2012 No. 273 (as amended on April 24, 2020), citizens of Russia have "the right to learn their native language, including Russian as a native language, within the opportunities provided by the education system, in the manner prescribed by the legislation on education".

The strategy and the existing theoretical and methodological base allow us to simulate the possibilities of creating an DSE in native languages. The model can contain both invariant components and variable components. The key figures should be participants in educational relations – students and their parents, teaching staff, school administration and other organizations engaged in educational activities.

4. Purpose of the Study

The aim of the study is to scientifically substantiate and design a DSE model at the level of primary general education, which will have a beneficial effect on the study of native (ethnic) languages, motivation for learning them by children and adults. In modern conditions, the natural speech environment (family, social, educational) requires special support. The absence of a speech environment in schools speaks of the need and expediency of its creation by artificial means as a set of conditions close to the natural ones contributing to the assimilation of the native language and development of a language ability.

To achieve the goal, it is necessary to solve a number of priority tasks: 1) to specify and substantiate the conceptual apparatus; 2) to divide schools according to the functions of native languages; 3) to design a DSE model which can be implemented in schools located in places of traditional residence of indigenous minorities.

5. Research Methods

To solve the tasks, theoretical and empirical research methods were used: an analysis of scientific literature, regulatory and strategic documents on language education; an analysis of the dynamics of the indigenous peoples' languages; classification and typology; DSE modeling; description of the concepts of speech environment, language environment and formulation of a new definition of the concept of developing speech environment; pedagogical observation of educational activities in the format of video lessons, studies of documents and information presented on the official websites of schools; a remote survey of school managers; an analysis, generalization and comparison of initial theoretical and analytical data and survey results.

6. Findings

The results obtained are as follows:

6.1. The conceptual apparatus

Three main terms which interact closely have been defined.

1. *Language environment*. The language environment is an environment aimed at learning a certain language. The language system is acquired through special studies, then it is worked out in practice (speech). In this environment, the theory is ahead of practice. The degree of language acquisition (vocabulary, grammar, syntax) is subject to measurement, although the student's speech activity may be at a low level due to the lack of a speech environment. We have conventionally named this phenomenon as "language through study".

2. *Speech environment*. The concept of speech environment is defined as an environment aimed at developing oral speech skills (usually in the native language) in early childhood in a natural way. The language is learned without knowledge of grammatical rules and linguistic facts. In this case, practice is ahead of theory (e.g., the child's unconscious acquisition of the native language (language / languages of the parents) in the family from infancy). We called this phenomenon "language through speech."

3. *Developing speech environment* is defined as a sub-environment of the educational environment, which is a specially organized didactic system aimed at activating, stimulating and developing motivation in children to master their native (ethnic) language, speech activities, communicative activities when obtaining preschool and general education in the absence of a speech environment / limited functions of the native language in society. Language is acquired through speech activities of others. From this perspective, theory and practice are in complementarity. The younger the child, the more intensive the effect is expected. The classroom study of the language system is supported by speech practice. In the absence of a speech environment, language acquisition within the classrooms lessons is impossible, because there are no speech activities, live communication.

The main idea (concept) of modelling a DSE is to create favorable conditions for stimulating speech activities in native (ethnic) languages of students or their parents who do not speak them, and to improve the status of their native languages in educational organizations located in places of traditional residence of the indigenous peoples of the North. Thus, the DSE is an interdisciplinary phenomenon in

terms of pedagogy, psychology, linguodidactics and sociology, which reflects the linguistic situation of the indigenous peoples of the North.

6.2. Typology of schools

Based on the classifications of the state of the indigenous peoples' languages and Russian regions where the indigenous peoples live, as well as the results of a distance survey, we determined the types of schools by the functions of their native languages (see Table 1): the high level (type 1) indicates the need to introduce an "improving DSE model; the medium level (type 2) – the supportive DSE model; the low level (type 3) – the stimulating / restoring DSE model. If the language of the indigenous peoples of the North has never functioned in a school (the zero level), but there are positive trends that indicate intentions to study the native language and culture, it is necessary to introduce an ethnocultural component into the educational process (the “introducing” model, which requires large organizational and methodological resources).

Table 1. Typology of schools according to the level of functioning of their native languages

Classification 1 (Russian regions)	Classification 2 (languages of the IPN)	Types of schools	DSE model
Group 1 – regions with favorable conditions	Group 1 – languages with more or less favorable conditions – all age groups speak the language	Type 1 – school requiring the development of the native language of the indigenous peoples	Improving DSE model
Group 2 – regions with serious problems	Group 2 – languages with serious problems – the older generation and a small part of the middle generation speak the language	Type 2 – school requiring the preservation of the native language of the indigenous peoples	Supporting DSE model
Group 3 – regions with a disastrous situation	Group 3 – languages with a disastrous situation – only part of the older generation speaks the language	Type 3 – schools where the mother tongue does not function (loss of the mother tongue)	Stimulating/ Restoring DSE model
Group 4 – regions where the indigenous language is already dying out	Group 4 – an endangered language (total loss of the native language in the family) – less than 100 people speak the everyday language	Type 4 – schools where it is necessary to introduce / preserve an ethnocultural component	Introducing DSE model

The trends in the functioning of the native language can be of three types: stable, developing and degrading. They can be identified by including questions on the dynamics of the language situation in the school. The remote survey conducted in schools located in 14 regions of Russia was based on the Google platform and included 16 questions (link here: <https://forms.gle/6imPtwrNowwfCPGKA>), specifying the number of native language learners, teachers, academic hours and extracurricular activities; forms and schemes for the implementation of extracurricular (extracurricular) activities, the degree of technical support; the presence of an ethnocultural subject-developing, and information environment, projects being implemented to preserve native languages, local acts regulating educational activities. The electronic

questionnaire was sent to 35 schools. The survey results were used to check the reliability and substantiate the initial theoretical data.

6.3. Designing a model for creating a DSE

In accordance with the identified types of schools, we have identified four DSE models as components of the projected DSE model (see Fig. 1): 1) the stimulating / restoring model is aimed at creating conditions for learning the native language, i.e. with a loss of the native language (the lack of a language in a school, but the manifestation of a tendency indicating the desire of children and their parents to learn the language); 2) the supportive model is aimed at creating conditions for preserving the native language with a partial presence of the speech environment in a school; 3) the improving model is aimed at creating conditions for the development of the native language in the presence of a sufficient speech environment at school. The fourth model is the most difficult model to implement, but it is a qualitatively justified model. It is a model for creating a DSE "from scratch" with a total loss of the native language at school (the language has never been studied at school). In this case, cultural identity plays an important role for children as one of the channels for expressing their belonging to a certain ethnic group. The "introducing" model is more focused on the ethnocultural component with elements of the native language.

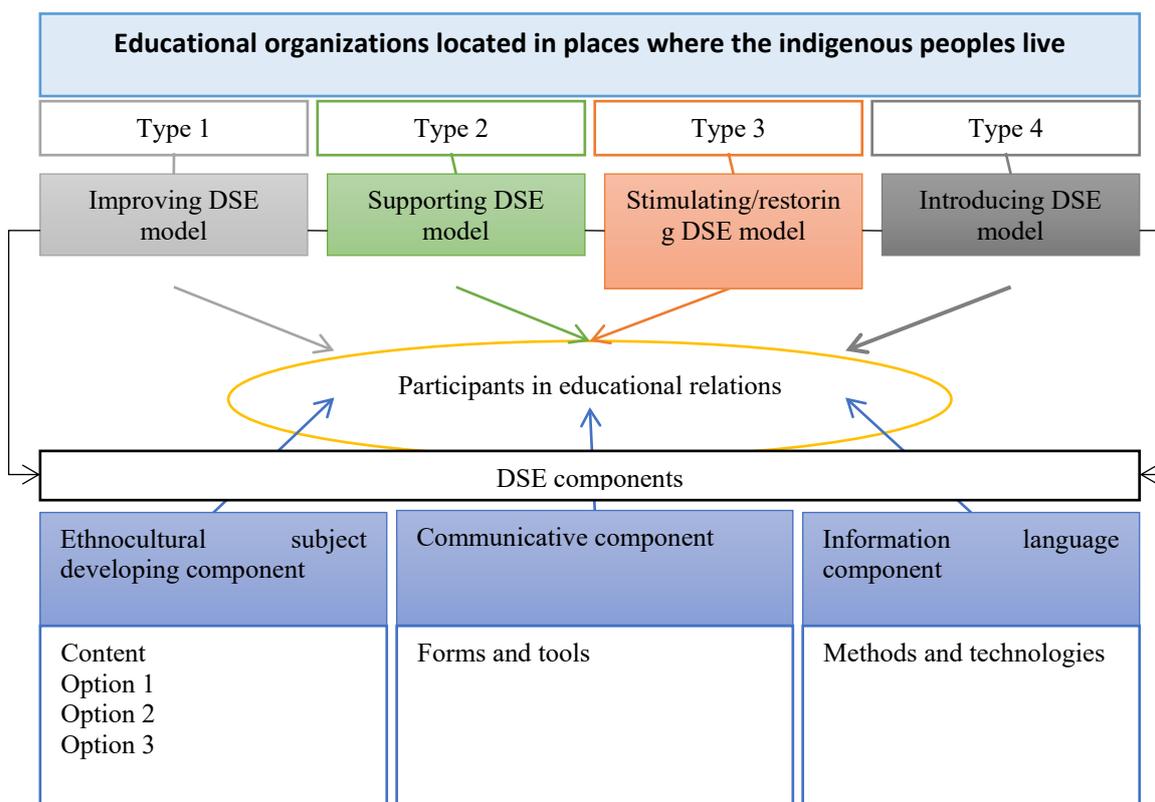


Figure 1. Model for creating a DSE with invariant and variable elements

The model demonstrates the DSE structure and peculiarities of its creation in schools of various types, taking into account the linguistic and educational situation. We distinguish the following DSE components: 1) the ethnocultural subject-developmental component (material ethno-oriented

environment); 2) the communicative-speech component (teacher's speech and speech interaction of participants in educational organizations); 3) informational language component (language design of the school space and its territory).

Each component has its own components: content (vocabulary, speech constructions, cliché phrases, dialogues, texts, etc.), forms and means (lesson stages, school events, workshops, game attributes, panels "speech photo zones", "language trees", communicative dictionaries, a loudspeaker, WhatsApp messenger, digital resources, etc.), methods and technologies (methods of mediatory dictation", "educational breaks", play methods, ICT technologies, partial CLIL technology, karaoke technology, etc.). These components are aimed at boosting cognitive activities of children (interest, activation of background knowledge), introducing them to their native culture, developing speech skills in their native (ethnic) language, mastering the native language system (development of language abilities), affecting all analyzers. They are present in the school space, in class and extracurricular activities (family environment, additional education, self-education).

7. Conclusion

The following conclusions can be drawn:

1. The developmental potential of an educational organization can be fully realized through the development of a "speech program" (a DSE creation program), use of the native language of the indigenous peoples of the North in the local documents (the Charter of the school, Regulations on the languages of education).

2. The phrasebooks in languages of the indigenous peoples of the North can have a positive effect. It can consist of sections dedicated to students, parents and teachers of other disciplines than languages.

3. For parents of students, recommendations are needed on language education, speech development, the importance of mastering the native language, bilingualism, including metalinguistic abilities. Fluency in the native language does not have a negative impact on the educational results of schoolchildren, including the Russian language. However, some researchers argue that it has a negative effect in the urban environment (Alos-i-Font & Tovar-Garcia, 2018).

4. For the network interaction of schools, monitoring of the dynamics of functions of the native language, it is necessary to form a register of schools and kindergartens located in places of traditional residence of the indigenous peoples, where the native languages are taught.

5. As an additional measure to meet the ethnocultural needs of children, a tutor (or a native speaker who meets the qualification requirements) is needed.

It is necessary to diagnose and characterize the speech and language development of children "at the entrance" and "at the exit", including by using an individual approach. At the same time, one should not forget about helping children develop motivation to use their native language outside the classroom. Through the DSE, it is necessary to reach the level of national-Russian bilingualism. Children who speak two languages have a number of advantages over their monolingual peers. These are their ability to navigate in a bilingual environment (Rubio-Fernández, 2017), divergent thinking, successful mastering of a third language. Bilingual children read better, and their phonological skills are better developed (Eviatar et al., 2018), they have an analytical approach to speaking and writing (Bialystok, 1991) and a higher level of spelling literacy.

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