



Pedagogical conditions conducive to the formation of global competence of schoolchildren

Rais F. Shaikhelislamov ^{1*}, Leysan E. Mingalieva ¹, Alla Sh. Biktasheva ¹,
Regina G. Sakhieva ¹, Nail R. Salikhov ¹, Renat I. Gaisin ¹, Farkhat Sh. Zaripov ¹,
Tatjana Yu. Gainutdinova ¹, Raisa G. Biktemirova ¹

¹ Kazan (Volga region) Federal University, Kazan, RUSSIA

*Corresponding author: sh.rais24@gmail.com

Abstract

The article examines the essence and structure of global competence as a multifaceted cognitive, socio-emotional and civic learning goal. The study is aimed to identify a set of pedagogical conditions that contribute to the formation of global competence of schoolchildren, as well as determining the opportunities of school education in the formation of a responsible citizen. The study used the methods of theoretical analysis and generalization of the results of completed monitoring studies carried out by the Volga Region Center for Advanced Training and Professional Retraining the Institute of Psychology and Education of Kazan (Volga region) Federal University. (hereinafter referred to as the Center) in 2011–2019, which made it possible to obtain a fairly complete picture of the problems and difficulties of teaching staff on a wide range of issues related to the implementation of professional activities. Analysis of the content component of global competence allowed the authors of the article to come to the conclusion that this category is a multicomponent education, the development efficiency of which is determined by taking into account a certain number of didactic conditions and rules associated, first of all, with the implementation of the system-activity approach in teaching and intersubject integration. It is emphasized that the school is called upon to form that fundamental core, which further determines the activity of a person, contributes to his active life in a society that develops along the path of interaction between cultures and peoples. However, the research conducted by the Center in 2011-2019 reveals that the majority of pedagogical workers today experience difficulties in designing a modern lesson in the context of the system-activity approach and the implementation of an intersubject approach, despite the large-scale introduction of the Federal State Educational Standard in the system of primary and basic education since 2011. In this regard, the task of professional development of teachers and the management team of the school in the development of universal skills and competencies of the 21st century in schoolchildren acquires particular relevance. And this, in turn, requires radically new approaches, forms and methods of organizing additional professional pedagogical education. Against this background, as a positive example, the authors note the activities of the Volga Region Center for Advanced Training and Professional Retraining of Kazan (Volga region) Federal University, which today is a large institution of additional professional pedagogical education in the Republic of Tatarstan, capable of solving large-scale educational and scientific problems. The development of functional literacy of Russian schoolchildren has been identified as one of the key research areas of the Center's research and teaching staff.

Keywords: PISA, functional literacy, global competence (global competencies), professional competence of teachers, additional professional pedagogical education, human capital, professional difficulties of teaching staff, intersubject integration, system-activity approach in teaching

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INTRODUCTION

The Decree of the President of the Russian Federation Vladimir Putin of May 7, 2018 "About national goals and strategic objectives of the development of the Russian Federation for the period up to 2024" formulated a priority purpose: ensuring the global

competitiveness of Russian education, Russia's entry into the top 10 countries in the world in terms of quality general education. It is obvious that a country's

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competitiveness is determined based on an analysis of a wide range of indicators. However, among these indicators, the results of international comparative studies (PISA, PIRLS, and TIMSS) occupy a special place. A key indicator of the success of the entry of the Russian Federation, including the Republic of Tatarstan, into the top ten world leaders is the effectiveness of the Russian school in the formation of functional literacy of schoolchildren, which is an active component of human capital, a driving force of socio-economic, cultural development of society, a factor of personal and social well-being of citizens.

Despite the fact that the international expert community has traditionally focused on three components of functional literacy, in particular, reading, mathematical and natural science literacy, a gradual expansion of scientific and pedagogical ideas about the nature and structure of functional literacy of schoolchildren in favor of “new »Types of skills (Koval and Dyukova 2019, Kvon et al. 2018, 2019, Makarova et al. 2019, Potapova et al. 2018) responsible for the successful socialization of a modern person and his adaptation to the conditions of a rapidly changing world. Thus, the PISA-2018 study for the first time included global competences as an innovative interdisciplinary component, considered in the structure of functional literacy as the most important universal skill (soft skills) of a person, in particular the ability to critically consider problems of a global nature and intercultural interaction; understand and evaluate different points of view and worldviews, be aware of how cultural, religious, political, racial and other differences can affect the perception, judgments and views of people (Kovaleva 2017, Orekhovskaya et al. 2019); interact successfully and respectfully with people (including in the digital environment) based on a shared respect for human dignity. Global competencies include the ability to act responsibly and effectively, individually or in a group, in various situations to ensure their own and collective well-being, without jeopardizing the needs of future generations (The OECD PISA 2018). The interest and awareness of schoolchildren about global development trends, the ability to manage behavior, openness to new things, and emotional perception of new things are also assessed (Kovaleva 2017). International and Russian research focuses on a number of critical aspects that cross national boundaries, such as climate change, education, gender equality, depletion of natural resources, energy and raw materials problems, social inequality, demography, war and peace, intercultural interaction, migration, poverty, human rights, international terrorism, etc. (The OECD PISA 2018).

PROBLEM STATEMENT

It should be noted that the problem of developing the global competencies of schoolchildren is absolutely new

for both Russian teachers and a significant part of teachers in other countries. International experts in the field of education and policy (Reimers 2009, Wagner 2008, Zhgenti et al. 2018, Zyubina et al. 2019) note the fact that today the majority of schools are not sufficiently busy preparing children and adolescents for solving global problems. At the same time, a number of countries, such as Sweden and India, are planning to include global competencies in their school curriculum in the near future (Sälzer and Roczen 2018).

If we consider global competence as a multifaceted cognitive, socio-emotional and civic goal of learning (Boix Mansilla 2016), objectively the task arises of building a qualitatively different learning system, where fundamentally new tasks are posed and solved, previously unused approaches and directions are updated, innovative conceptual foundations and guidelines are implemented and principles for assessing the educational achievements of schoolchildren, on the basis of which effective educational resources and school curriculum are created. It is obvious that it is the school that is called upon to form the fundamental core, which further determines the activity of a person, contributes to his active life in a society that develops along the path of interaction between cultures and peoples. However, the results of PISA-2018 clearly show that school education in our country needs to make urgent effective decisions, including a deep modernization of the personnel, financial, economic, educational, material and informational and methodological base for the development of all components of the functional literacy of schoolchildren. The modern school is not yet ready to keep up with the challenges of society and provide within its walls such a learning environment that would allow young people to explore the world outside their immediate environment, interact with people of different cultural backgrounds, and critically analyze global issues. In this regard, the task of professional development of the teacher (Shaidullina 2006, Shaikhelislamov 2019) and the management team of the school in the development of universal skills and competencies of the 21st century in schoolchildren is of particular relevance. And this, in turn, requires radically new approaches, forms and methods of organizing additional professional pedagogical education.

The Purpose of the Article

1) to identify a set of pedagogical conditions that contributes to the formation of global competence of schoolchildren; 2) to determine the potential of school education in the formation of a responsible citizen. The study used methods of theoretical analysis and generalization of the results of completed monitoring studies conducted by the Volga Region Center for Advanced Training and Professional Retraining of Kazan (Volga region) Federal University (hereinafter

referred to as the Center) in 2011-2019, which allowed us to get a fairly complete picture of the problems and difficulties of teachers on a wide range of issues related to the implementation of professional activities (Siege, 2008). Respondents, including teachers and heads of educational organizations, were involved in quantitative (questionnaires) and qualitative (focus groups) research. In order to get qualified answers to the research questions, specially organized seminars and trainings were held for the respondents.

RESULT

The study of the essence and components of global competence (Akishina et al. 2017, Kardis et al. 2019, Koval and Dyukova 2019, Kovaleva 2017, Kuznetsova et al. 2018, Mutavchi et al. 2018, The OECD PISA 2018) allowed us to conclude that this category is a multi-component education, the effectiveness of which is determined by taking into account a certain number of didactic conditions and rules: stimulating students' cognitive activity, saturating the learning process with research forms of work, using and necessary combination of traditional and innovative forms of work, problem and research methods of teaching. In addition, it was concluded that the structure of global competence is expressed in the unity of cognitive (knowledge, skills), activity and personal (values and attitudes) characteristics that allow students to effectively carry out independent cognitive activities, critically study information sources, and participate in open cross-cultural interactions.

The identification of these essential characteristics made it possible to note two sides or forms of manifestation in global competence: internal (personal) and external (activity), the most important condition for the formation of which is an integrated approach, which presupposes a holistic pedagogical impact, the focus of all school education on multiculturalism, interculturality, globality. This approach, first of all, requires the integration of global problems, themes and issues in all school subjects (UNESCO 2014). The joint development of the educational program of the school by teachers of various subject areas (research of topics, selection of content that contributes to the development of global competencies of schoolchildren) provides an excellent opportunity for students to study global and intercultural issues in a broad aspect (The OECD PISA 2018).

However, as our long-term studies of the state of Russian school education show, in school practice today, the main source of the subject content of global competencies is only the disciplines of the humanitarian and socio-economic cycle, which form the general culture and intellectual potential of schoolchildren, their awareness of global problems. An interdisciplinary approach, as a necessary condition of modern education, is practically not implemented due to the lack

of interdisciplinary agreement between programs, textbooks, a high degree of sovereignty of individual disciplines and, as a result, inconsistency in terminology, designations, etc. It is obvious that the implementation of intersubject integration requires additional efforts from the teacher in the course of long-term planning. Conducted by the Center in 2011-2019 Monitoring studies of the problems and difficulties of 1.073 pedagogical workers in six federal districts (except for the Ural and North Caucasus) on a wide range of issues related to the implementation of the Federal State Educational Standard (hereinafter - FSES) show that, despite the fact that teachers generally accept the task of forming the functional literacy of schoolchildren and are willing to work in this direction, including the development of specialized tests, assignments, tests, least of all they are interested in developing new work programs, educational and practical assignments on an intersubject basis (Siege 2008). Conducted by the Center in September - November 2019, a focus group survey of 200 teachers who are planning to take part in the programs of additional professional pedagogical education (hereinafter referred to as APPE) in 2019-2020, also showed the least interest in studying the issues of interdisciplinary integration (less than 30% of respondents). Priority was given to issues related to the use of digital technologies in teaching, inclusive models of education for children with disabilities, psychological and pedagogical methods of motivating students.

At the same time, the analysis of the content component of global competence in the international PISA study allows us to conclude that the implementation of intersubject integration occupies almost a key position in the formation of the global and intercultural worldview of schoolchildren. Developing over-subject competencies such as the ability to analyze issues and situations of local, global and cultural significance (for example, poverty, economic interdependence, migration, inequality, environmental risks, conflicts, cultural differences and stereotypes) or the ability to understand and appreciate different points of view and worldviews, establishing positive interaction with people of different national, ethnic, religious, social or cultural backgrounds or gender cannot be limited to the curriculum of only a number of disciplines. The global nature of education involves going beyond the boundaries of the disciplines studied and school curricula.

As an example let's look at the content of the PISA 2018 cognitive test «Are global temperatures rising? ». This cognitive test involves the integration of the subject areas of geography (awareness of global warming), mathematics (the ability to interpret graphs, charts, diagrams). In order to successfully complete the tasks of the test block, the student must have reading literacy and a whole range of skills: critically analyze issues of a global nature, evaluate information in terms of the

validity of sources and completeness of the description of the problem, compliance with the context of the assignment; recognize the problem in the source information, evaluate actions and consequences (Podymov et al. 2019, Selivanova et al. 201). Thus, the analysis of the content component of global competence, its value orientation and dynamic parameters in the international PISA study quite justifiably gives reason to call it cross-curricular competence (Sälzer and Roczen 2018). However, at the same time, one should not forget that since global competence is a fairly young structure, the scientific community has not yet reached a common consensus in defining its essence. For example, in Germany, the development of the global competence of citizens is considered as a factor (condition) for the global and sustainable development of the country (Lang-Wojtasik and Scheunpflug 2005, Rost 2005, Sälzer and Roczen 2018). English-language research focuses more on a person's ability to communicate, and this ability is often differentiated into intercultural communication, linguistic and cultural competencies or "acceptable and understandable" behavior (Fantini et al. 2001, Sälzer and Roczen 2018). Russian research in the field of global competencies also adheres to its own position in defining a set of "sensitive" problems and situations for the development of assessment tools focused on the specifics of Russian society. So, according to scientists Koval and Dyukova (2019), the issues of intercultural interaction are of great importance for multinational Russia, but it would hardly be advisable to disclose them through the problems of migration and migrants. Due to the lack of common approaches to understanding and defining global competencies, more than 30 countries (i.e., almost half of the PISA 2018 participants) decided to refrain from conducting a test to assess the formation of global competence of their 15-year-old students. Meanwhile, despite the discussions of the participating countries regarding the validity of the PISA 2018 assessment tooling, most agree on the reasonableness of the innovation itself (Sälzer and Roczen 2018). Obviously, the focus of the research should be on certain intercultural invariants, "universal" cognitive components of global competence, which include critical and analytical thinking about global problems, certain personal characteristics, skills and inclinations, such as openness to intercultural experience or intercultural communication skills, moral, ethical and social attitudes, the formation of which, of course, requires an effective interdisciplinary approach.

The identification in the course of research of the professional difficulties of pedagogical workers of narrow zones associated with the implementation of interdisciplinary integration, led to significant changes in the content of the course training of the Center's students in 2019-2020. The following were identified as effective measures to provide methodological

assistance to teachers in matters related to the integration of school disciplines:

- Development of guidelines for teachers of various subject areas for the implementation of interdisciplinary connections;
- Providing methodological assistance to teachers in the development of school intersubject courses in the framework of extracurricular activities;
- organizing and conducting intersubject seminars on the development of global competencies of schoolchildren;
- Provision of methodological assistance in matters related to the organization of a modern multicultural space at school (motivating environment);
- improving the professional and methodological level of teachers in the development of the global competence of schoolchildren, including improving the qualifications of teachers under the APPE programs of an integrated nature;
- providing methodological assistance in the implementation of joint activities with parents in order to form the global competencies of children, etc.

The activities of the Center in this direction have made it possible to significantly improve the professional skills of teachers who underwent advanced training in 2019-2020 in issues related to the creation of effective didactic conditions for the development of the global competence of schoolchildren. Obvious shifts could be observed already at the stage of defending projects developed by teachers and management personnel as part of the final certification under the programs of additional professional pedagogical education of the Center.

The next task of the study was to find out to what extent the teacher's readiness to develop global competencies in students depends on their professional competence in the construction of a lesson in the context of a system-activity approach. During the research conducted by the Center in 2011-2019 (Siege 2008), it was found that most focus group participants today experience difficulties in these issues or show adherence to the well-established traditions and technologies used in the lesson, despite the large-scale introduction of the Federal State Educational Standard in the system of primary and basic education since 2011. At the same time, it is obvious that the doctrine of education, based on the dominance of a student in teaching, who must plan his work, set goals, independently study various sources of information, and be successful in the classroom is the most optimal condition for the development of competencies in the 21st century. In this regard, the task of the modern teacher is to subordinate his activities to the activities of the student. A successful student acquires knowledge himself. If a child has poor knowledge, it means that he

Table 1. Student roles in the PISA cognitive tests

Role of the student	The Format Task (scenario)	Estimated characteristics
Student as a researcher	At the end of the quarter, the student must present a joint research paper with classmates. To this end, he should study information from websites, other sources, as well as materials from team members.	This task type makes it possible to evaluate several types of cognitive processes: - the student's ability to select information (can be assessed by presenting him several results from web requests and asking him to choose the one that is most suitable for the study); - the ability to understand different positions, points of view (can be assessed by asking him to study the reasons for misunderstanding or conflict between two members of the research group).
Student as a journalist	The student is invited to play the role of a journalist who is preparing to write an article on a specific issue. To this end, he will have to study excerpts from newspapers or social networks, after which he is asked to answer questions that assess the general understanding of the information presented, the ability to assess the quality and reliability of information contained in various sources, the ability to reason outside the text, questioning possible subjective interpretations of information by the authors. Further, the student is invited to look for their sources of information, determine the circle of respondents for interviews, and select the appropriate questions.	This format of the task allows assessing the ability of students to critically approach the choice of this or that information, to assess its reliability.
Student as a mediator	The student is suggested to study the text, presented in the form of a conversation, during which two or more actors are in conflict on any issue. Questions on the text encourage the student to evaluate and understand different points of view, the reason for the disagreement between the characters, which may also be related to their social and cultural characteristics. The test person is asked to generate or identify possible solutions that take into account the interests of all or most of the parties to mitigate or resolve the conflict.	This scenario format allows assessing the students' ability to acknowledge, position and interpret different points of view in a situation of social conflict, as well as propose solutions that take into account and integrate these different positions.
The student as a participant in the debate	The situation is presented in the format of a debate on a specific issue, in which the student participates as a representative of a specific point of view or position. The student is invited to independently study the material (reference information), which he can use during the debate to formulate statements and / or choose answers. Questions to the assignment encourage the student to develop (or choose) arguments in support of his point of view, compare, critically evaluate, refute different points of view on the problem.	The debate format makes it possible to assess the degree of student involvement in the problematic, as well as their communication skills.

does not know how to obtain it well. The teacher must teach the child to set cognitive goals, plan the sequence of his actions and independently test his knowledge, while being a consultant, navigator and assistant in the successful development of a modern child (Shaikhelislamov 2017).

As you know, functional literacy is an international problem not only for developing countries, but also for countries - economic leaders. At the same time, functional literacy is considered in the PISA studies in the context of the skills of the 21st century and in this sense is coupled with the global competence of the student. It is no coincidence that the PISA 2018 study defines a 15-year-old student as an active subject of educational activity, showing independence in solving educational tasks and researching issues that go beyond the educational process. **Table 1** shows the options for student roles in the PISA cognitive tests (The OECD PISA 2018). At the same time, the proposed task formats are not exhaustive, in the process of developing the toolkit, other types of "scenarios" can be studied (The OECD PISA 2018).

It is obvious that the introduction into widespread practice of forms of organizing educational activities that imply active independent activity of students, as well as regular interaction of students, within the framework of which values, moral, ethical and social attitudes, conventional norms of behavior, communicative competencies are formed, at the same time, initiative is encouraged, the ability to express an opinion, the

adequacy of behavior during interaction requires the professional readiness of the teacher (The OECD PISA 2018).

The research results, TALIS 2018 (Report on the results of the International Study of the Teaching and Learning, 2018), made it possible to identify the most common professional difficulties of teachers in matters related to the constructing of a modern lesson. It was found that 64-73% of Russian teachers demonstrate confidence in their ability to independently explain new material in a different way in case of difficulties for students, while only 51-67% are willing to vary teaching methods in the classroom, and only 42-56% of teachers are able to provide assistance learners in the development of critical thinking. It was also found that Russian teachers, in comparison with the average indicator for all countries participating in the TALIS study, are less likely to give assignments aimed at group work of students (43% versus 53%). Only 26% of teachers organize work in the form of a long-term (at least a week of carrying-out) project. At the same time, above the TALIS average (58% versus 38%), the share of Russian teachers who report that they regularly give assignments in which there are no obvious answers. The indicator of Russian teachers who allow the use of information and communication technologies while working in class is also 17 points higher (69% versus 52%). These studies allow us to conclude that, despite the introduction of the Federal State Educational Standard more than 10 years ago, today there are a

significant proportion of teachers who prefer traditional forms of organizing the lesson, in which the teacher invariably plays a leading role. At the same time, it is permissible to assume that these figures may be much higher, in view of the fact that in the course of such surveys, the Russian teacher often tries to give "socially desired" answers and hide narrow areas. According to studies of professional deficits of teaching staff, conducted at the Center in 2011-2019 (Siege 2008) the ideology of the Federal State Educational Standard was fully accepted by 13% to 38% of the respondents. From 4% to 14% of teachers declare their complete disagreement with the ideas of the standard, depending on age categories. At the same time, it is difficult to explain why among teachers with an experience of 10 to 20 years of work, the least of all who accepted the standard completely and most of all who only partially accepted it. The vast majority (52% - 73%) belong to the category of teachers who have partially adopted the standard, which generally correlates with the data of the TALIS 2018 study.

In order to study the possibility of forming a technological chain from the implementation of the Federal State Educational Standard to the formation of teachers' readiness to implement a fundamentally new task - the formation of functional literacy of schoolchildren in the context of PISA international studies, the Center undertook an exploratory study of the value orientation and teacher's attitude to the upcoming large-scale activities to develop functional literacy; their immediate intentions in terms of improving the functional literacy of schoolchildren; resources that the teacher plans to use to improve his professionalism in the development of functional literacy, etc. One of the informal conclusions we received in the research process was the understanding that the teacher is ready to put into practice only those ideas that he accepted and became the basis of his pedagogical worldview (Siege 2008).

The revealed professional difficulties of teachers in the implementation of effective forms of organizing training suggest that the mechanism of additional professional education in certain regions is insufficiently effective. An analysis of the scientific, methodological and human resources of the system of additional professional education allows us to identify at least two reasons for their insufficient effectiveness in organizing the professional development of teachers. Firstly, in many territorial subjects of the Russian Federation, is a shortage of personnel in the field of scientific and pedagogical workers who show deep competence in the development of functional literacy of schoolchildren. Secondly, at present there is an oversaturation of the market of additional educational services with proposals for improving the qualifications of teaching staff. It is extremely difficult for a teacher to navigate in these conditions and choose a qualified organization that will

ensure his competence in the theory and methodology of developing the functional literacy of schoolchildren. This state of affairs is especially typical for the Republic of Tatarstan, the cities of Moscow, St. Petersburg, Samara, etc.

Added to these problems is the fact that recent programs for the professional development of teachers often do not meet the requirements of present-day society and the actual professional needs formed by teachers, and most often are ineffective, formal in nature. So, according to the statements of the respondents participating in the TALIS 2018 questionnaire, most often, APPE programs are traditionally aimed at developing competencies in the main subject area (89%), improving teaching methods (89%). The least frequently reported professional programs include topics of communication with representatives of other countries and cultures (26%) and issues of teaching in a multicultural or multilingual environment (24%). The question arises: how, in this case, the school can fully develop students' awareness and understanding of intercultural differences, form a respectful attitude towards the cultures and traditions of the peoples of the world, overcome various stereotypes, develop the communicative competencies of schoolchildren, including the ability to enter into intercultural interaction, (cooperation, partnership) in solving educational problems and global problems, including in foreign languages?

It is obvious that achieving a new quality of Russian education requires fundamentally new approaches, forms and methods of organizing additional professional pedagogical education. To overcome the lag of the Russian schoolchildren in the international ranking, it is necessary to develop and implement in the regions APPE programs that provide for the solution of an important task: the formation of teachers' competence in the development of functional literacy of schoolchildren on the basis of an activity approach. In this regard, since 2017, the development of all structural components of the functional literacy of schoolchildren have been included in the programs of additional professional education for subject teachers and heads of educational organizations. In 2019, 6-hour educational modules were included in the Center's APPE programs, providing for a deeper study of the content of reading, natural science, mathematical, financial literacy, and global competencies. The classroom coverage of these APPE programs was 908 teachers, of whom 278 were teachers of the Russian language and literature; 203 math teachers; 75 teachers of history and social studies; 105 primary school teachers; 247 teachers of the natural science cycle.

In 2019, more than 80 programs of additional professional education of the Center were modernized: the opportunity for the implementation of practice-oriented technologies for advanced training, as well as

effective forms of training in cooperation and in groups, was significantly expanded.

In order to form a sustainable, competitive system for the development of functional literacy of schoolchildren, since 2019, a system of corporate training for education workers has been developed and implemented with simultaneous coverage of representatives of republican and municipal education authorities, management teams of schools, heads of methodological associations, teachers (primary grades, mathematics, physics, chemistry, biology, computer science, technology, social science) with a deep study of the issues of interaction of all levels of education management and teaching staff.

It should be noted that the Kazan (Volga Region) Federal University is deeply motivated to provide the necessary assistance to the Russian schoolchild in the development of his functional literacy, the ability to withstand competition in mastering new knowledge and technologies, the ability to adapt to changing learning conditions, and thereby ensuring his competitiveness.

In 2019, the university was ranked among the top 100 universities in the Times Higher Education (THE) British edition (Ranking - 94). The growth in the subject ranking THE "Education" testifies to the high international competitiveness of the university, its powerful potential, the ability to provide effective assistance to the school in ensuring its global competitiveness.

The Volga Region Center for Advanced Training and Professional Retraining, created in the structure of the university in 2011, is today a large institution of additional professional pedagogical education in the Republic of Tatarstan, capable to solve large-scale educational and scientific problems. Over the period from 2011 to 2019, more than 100 thousand people were trained at the Center. Annually more than 80 programs of DPPE are competitively selected by the Ministry of Education and Science of the Republic of Tatarstan.

More than 110 scientific and pedagogical workers of Federal State Autonomous Educational Institution of Higher Professional Learning "Kazan (Volga region) Federal University" annually take part in the implementation of APPE programs, including 15-25 doctors of sciences and professors, 80-90 candidates of sciences, associate professors, as well as a large contingent of practicing teachers of the highest qualification category. Classes of teaching staff of the Republic of Tatarstan are held in modern classrooms and laboratories of specialized institutes using the necessary equipment, instrumentation, drugs, chemical

reagents, robotic systems, the latest digital equipment, etc.

It should be noted that the staff of the Center has certain groundwork in the development of modern forms and methods of teaching and assessing the functional literacy of schoolchildren. On the basis of the Volga Region Center for Advanced Training, research is being conducted on the readiness of Russian regions to develop the skills of the 21st century schoolchildren. The development of functional literacy of Russian schoolchildren has been identified as one of the key research areas of the Center's research and teaching staff. In this regard, international and Russian experience in the development of global competencies of schoolchildren has been critically rethought, purposeful work is underway to modernize the training system for teachers and manage the process of developing the functional literacy of schoolchildren.

CONCLUSION

Research conducted by the Center to identify a complex of pedagogical conditions that contribute to the formation of global competence of schoolchildren and determine the potential of school education in the formation of a responsible citizen, allow us to draw the following conclusions: global competencies can be considered as a specific isolated value-integrative component of functional literacy (Koval and Dyukova 2019), interdisciplinary competence (cross-curricular competence), the formation of which is closely related to the implementation of the system-activity approach. The results of PISA-2018 clearly show that the competitiveness of a Russian student in the system of international measurements, first of all, depends on the level of the teacher's professional development and the effectiveness of managing the development of functional literacy. Traditional mechanisms of APPE are ineffective in solving modern educational problems and do not meet the new needs of society. It is necessary to develop a mobile, flexible system of professional support for teaching staff that meets current needs and is able to address the identified professional deficits. The materials of the article are of practical value for scientific and pedagogical workers working in the system of general, higher, additional professional education.

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