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Challenges in interaction between organisations of comprehensive and supplementary education

Abstract. *The article deals with notion of supplementary education and its interaction with organizations of comprehensive education. The authors give profound explanations on the role, functions and necessity of supplementary education in learning process of schoolchildren. The authors of the article raise the problem of increasing the number of students who do not show interest in supplementary educational opportunities. The authors write about the problem of declining interest in self-development. There are many reasons that contributed to the creation of such a social situation, these are the financial situation of parents, a lack of parental attention and disinterest of children, as well as the lack of interaction between educational organizations and organizations of supplementary education. In addition, there were given deep analysis of efficiency of supplementary education in new trends of modern education. The authors emphasized the lack of interaction of this two type of education in the education system in the country. In the conclusion of the article, the authors propose such methodological techniques as the introduction of new computer techniques and techniques into standard classes to create fundamentally new areas, for example, robotics classes or organizing classes using the STEAM method.*

Keywords: *supplementary education, general education, interaction, educational organizations, new trends, supplementary educational institutions, robotics, STEAM, extracurricular training, modern education, development and modernization of education system.*

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Introduction

The formation of special scientific abilities (in science, technology, engineering and mathematics) is mainly involved in the organization of supplementary education. To determine the organization of supplementary education, we will also refer to the Law of the Republic of Kazakhstan «On Education» which defines the organization of supplementary education as: “Supplementary education of children is carried out in educational organizations and out-of-school organizations, the types of which are determined by the authorized body in the field of

education. Educational services for educational programs of supplementary education are provided to learners by educational organizations that implement general educational curricula of primary, basic secondary and general secondary education, and on a contractual basis.»

E. B. Yevladova defines the supplementary education of children as “an integral part of general education, which goes beyond the state educational standards and presupposes the child’s free choice of spheres and types of activities focused on the development in the process of practice-oriented classes of such personal qualities, abilities, interests that lead

to social and cultural self-realization, to self-development and self-education” [1].

A.G. Asmolov believes supplementary education “a search, variable education that tests other, non-general ways of getting out of various uncertain situations in culture and provides the individual with a fan of possibilities to choose his fate, stimulating the processes of personal self-development” [2].

V.P. Golovanov argues that “the supplementary education of children can be defined as a specially organized, stable process of communication aimed at shaping the motivation of the child’s developing personality to cognition and creativity” [3].

Researchers also characterize supplementary education as purposeful process of teaching and education, focused on development of personal qualities of a person and implemented through creative educational programs that are not included in the content of state education standards; education, which provides children with the opportunity to freely choose the forms and types of activities aimed at shaping their attitude and outlook, the development of a positive motivational orientation in the field of free time [4].

Main part

Currently, the system of supplementary education for schoolchildren is going through a period of formation. Lacking mandatory state requirements, it is endowed with the right to independently determine the meanings and values of its activities, based on the interests of children and taking into account state standards of general education.

“The main tasks of the supplementary education system is to create conditions for organizing and carrying out cultural leisure of children outside school hours by introducing into the educational process: active and activity technologies of teaching and upbringing, creating an emotionally attractive environment for engaging in a particular type of activity, a psychologically comfortable atmosphere of interaction as well as the availability of good

material equipment of the educational process and professional creative teachers” [5].

Supplementary education organizations provide children with the opportunity to develop special creative abilities, such as scientific, cognitive, musical, artistic, acting skills.

But at present, there is a tendency to increase the number of learners, who are not enrolled anywhere other than school. It should be noted that the chances of developing their creative abilities in children who do not attend supplementary education organizations are even lower. There are quite a few reasons that contributed to the creation of such a social situation, this is the financial situation of parents, a lack of parental attention and disinterest of children, as well as the lack of interaction between educational organizations and organizations of supplementary education.

Studying the scientific literature and articles on the problem of interaction between general and supplementary education, it can be stated that this problem is relevant at the present time.

Self-realization of the personality of a learners occurs in a certain environment and interaction with different objects (things, etc.), people, that is, in a certain environment. The state of the external environment can have both a stimulating and a depressing effect on the self-realization of a learner’s personality. An environment that promotes self-expression, revealing the potential of a person increases the effectiveness of self-realization and vice versa. This means that the creation of a creative environment in an institution of supplementary education will contribute to the disclosure of the personal potential of a teenager.

Supplementary education is a special type of education, an environment that has great opportunities in terms of personal development, meeting its needs, interests, creates conditions for creative self-realization in a variety of activities: art, technology, physical education, choreography, ecology, music and so on.

Interest in researching the problems of supplementary education for children has grown significantly in the last decade. Supplementary education of children is considered by scientists not only as the provision of supplementary

services that go beyond the limits of compulsory basic education, but also as an environment for adolescents to solve personally significant goals and objectives, organize leisure time, choose a circle of friends, choose life values and guidelines for self-development, creative self-realization and professional self-determination.

Considering the issue of creating a creative environment in an institution of supplementary education, it is logical to start with the definition of the term «environment». In the dictionary of the Russian language S.I. Ozhegov's environment is interpreted as «the surrounding social conditions, environment, as well as a set of people connected by the commonality of these conditions» [6].

The purpose of this interaction is to unite the efforts of the school and the organization of supplementary education in upbringing and education, expanding and developing the cognitive and scientific capabilities of students, pedagogical education, organizing and directing the activities of public and extracurricular organizations to actively participate in the educational process, and provide assistance to the family and school. Considering the fact that modern children read little, spend a lot of time at computers, gadgets, they observe limited interaction with the wide world of nature, it becomes necessary to take children out of school - to organize a system of interaction between an educational institution and municipal scientific institutions. Younger schoolchildren should actively visit science museums and science centers.

We want to determine the importance of interaction between organizations of general and supplementary education, having analyzed current trends.

Education trends are trends in education. Over the past decade, the education system has been actively introducing pedagogical innovations and computer-based teaching methodologies in order to improve the quality of education and its results.

The quality of teaching is a determining criterion for the effectiveness of the educational process in both traditional and any innovative teaching technology.

The first trend is educational robotics, which implements a modern approach to the introduction of elements of technical creativity into the educational process through the combination of design and programming. Integration of computer science, mathematics, physics, drawing, natural sciences with the development of engineering thinking is a powerful tool for the synthesis of knowledge, laying a solid foundation for systems thinking.

Robotics classes provide opportunities for the diversified development of students and the formation of the most important competencies outlined in the new generation standards:

- skills of conducting experimental research: hypothesis, search for solutions, observations and measurements, establishment of cause-and-effect relationships, assessment of the influence of individual factors, processing and analysis of results;
- subject skills (informatics): principles of modeling, design, design, algorithmization, programming;
- understanding of interdisciplinary connections: mathematics, physics, computer science, natural science, technology, music and other subjects;
- development of creative, imaginative, spatial, logical, critical thinking;
- development of communicative competence: work in a team (in a pair, a group) to develop and implement ideas, plan and implement activities, develop vocabulary and communication skills.

Teaching outside the classroom is the next trend. It is a format of learning through activities that can include research, application of knowledge in practice. Such training can take place in the form of a game, a quest, geocaching, photo hunting, a hike, or a field camp. At the same time, students are «immersed» in history, culture, nature, since certain tasks are set and appear before them.

Consider the example of Games in the Parks, one of the many opportunities for learning outside the classroom using GPS navigators, netbooks, and other electronic gadgets. Such a lesson should be well planned, taking into account all the risks of going out with children in

an open space. The essence of the game in the park (or park lesson) is to move the teams of students around the park using a plan, a map-scheme and performing tasks «tied» to the objects of the place explored during the game.

The third trend affects the narrow field of education, it is associated with the teaching methodology of the learning sciences. The teacher should not overlook the underlying concepts and concepts, but students need to work with real-life problem situations. “Education is a social process, and therefore, in the process of teaching natural sciences, the teacher should use more new technologies, including distance learning, form groups, design the transmission of knowledge from student to student,” emphasized Dr. Kees Thurlow [3, p.2] ...

One of the main trends in world education is STEAM. The fourth trend is a new educational technology that combines several subject areas as a tool for the development of critical thinking, research competencies and teamwork skills.

The abbreviation STEAM stands for:

- S - science,
- T - technology,
- E - engineering,
- A - art,
- M - mathematics.

Or natural sciences, technology, engineering, creativity, mathematics - disciplines that are becoming the most demanded in the modern world. STEAM curriculum is based on the idea of teaching students using an interdisciplinary and applied approach. Instead of studying each of the five disciplines separately, STEAM integrates them into a single learning path.

An important feature of working with this technology is precisely the collective work on the project. STEAM - allows you to use the right hemisphere of the brain, which is responsible for creativity, emotions, feelings. There are many examples of successful design work using this technology [7].

In accordance with our research we identified the following forms and methods of interaction of organization of comprehensive and supplementary education:

1. Forms of civil legal regulation of legal relations of educational organizations: contractual

regulation. Lease agreements used as contractual forms; gratuitous use contracts; contracts for the provision of educational services. Normative documents - local normative acts stipulated by the charters of educational organizations.

2. Form of cooperation: cooperation of organizations to achieve common goals

3. A form of active interaction between leaders, teachers and other employees of organizations through meetings, teachers' councils, planning meetings, conferences, workshops, etc.

4. The following methods and techniques are implemented in working with students : individual training, group training.

The teaching methods include: creative activity, play, fairy tale, visual activity, etc. In the work with teachers there can be use master classes, preparation of materials for publication, open classes, etc. We also highlight the conditions for interaction between organizations of general and supplementary education:

1. Interaction between the leaders of the general educational organization and the organization of supplementary education. (Heads of organizations of general and supplementary education organize activities aimed at developing creative abilities in children of primary school age. The organization of activities includes: general pedagogical councils, planning, organization of joint activities, control).

2. Staffing of organizations and supplementary education by the necessary teaching staff, as well as the availability of appropriate qualifications for teaching staff in general and supplementary education organizations. (Teachers and other employees must have the appropriate education and qualifications in accordance with the position held).

3. Availability of a material and technical base for the implementation of activities aimed at the development of creative abilities in children of primary school age. (The material and technical base should be provided by educational organizations of both general and supplementary education).

4. Providing extracurricular potential of a general educational organization. (When organizing joint activities aimed at developing creative abilities in children of primary school

age, the general educational organization should allocate extracurricular time for the implementation of this activity). We believe that when creating the above elements, the interaction of organizations of general and supplementary education will be more constructive and successful.

The variety of organizational forms of the educational process corresponds to the variety of content and methods of teaching supplementary education. In relation to teaching, the concept of «form» is used in two meanings: the form of teaching; form of training organization. The form of training is the external side of the organization of the educational process. It depends on the goals, content, methods and means of teaching the composition of the participants in the educational process. There are individual, group, frontal, collective, paired, classroom and extracurricular, classroom and extracurricular, school and extracurricular forms of education. The forms of education in the system of supplementary education are characterized by a mixture of emphasis from the front to individual and group ones. - this is the construction of a separate even of the learning process, a certain type of lesson (lesson, lecture, seminar, excursion, optional lesson, exam, etc. There are traditional and non-traditional forms of organizing children's activities in the educational process in the system of supplementary education. Traditional forms of organizing the educational process in institutions of supplementary education

1. Lecture - oral and introduction of any topic that develops the creative thinking activity of students.
2. Seminar in the form of group lessons in the form of discussion of prepared messages and reports under the guidance of a teacher; forms analytical thinking, reflects the intensity of independent work, develops the skills of public speaking.
3. Discussion is a comprehensive public discussion, consideration of a controversial issue, a complex problem: expands knowledge through the exchange of information, develops skills of critical judgment and defending one's point of view.
4. Conference is a meeting, meeting of representatives of various organizations to discuss and resolve any issues; instills the skills of open discussion of the results of their activities.

5. Excursion is collective hike or trip with the purpose of inspection, acquaintance with any sight; enriches sensory perception and visual representations.
6. The expedition undertakes a complex of diverse tasks to organize effective practice in the process of obtaining a profile result outside the classroom environment.
7. Tourist trip is the movement of people with a pear for a specific purpose; realizes the goals of cognition, education, health improvement, physical and sports development.
8. An educational game is an occupation that has certain rules and serves for learning new things, rest and pleasure, is characterized by modeling life processes in a developing situation.

Non-traditional forms of organizing the educational process in institutions of supplementary education:

1. Competition lessons: contests, tournaments, quizzes.
2. Classes based on methods of social practice: reportage, interview, invention, commentary, rally, benefit performance, oral journal, newspaper, project defense (develop the ability to project changes in reality for the sake of improving life, correlating personal interests with public, offering new ideas for solving life).
3. Classes based on non-traditional organization of educational material: presentation, confession (description, disclosure of the role of the subject of social purpose in a person's life, participation in social relations).
4. Fantasy classes: fairy tale, surprise, adventure.
5. Lessons based on imitation of social activities: court, investigation, academic council, parliament.
6. Sociodrama (role-playing game predetermined by the position of the main characters; the situation of choice, on which depends current problems), life and socio-psychological relations, self-awareness in the structure of social relations).

The main form of organization of the educational process in the system of supplementary education is an educational lesson. An instructional lesson is a period of time during which students are engaged in a specific subject. According to the main didactic goal, the following types of training sessions are distinguished:

- 1) study, assimilation of new material (lecture, explanation, demonstration, etc.);
- 2) consolidation and improvement of knowledge, abilities and skills

(repetition, analysis, exercises, problem solving, control, laboratory work, etc.); 3) independent application of knowledge, skills and abilities (independent work, seminars, discussions, conferences, auctions, performances, etc.).

Conclusion

Based on the characteristics of above-given trends, we can see the contribution of institutions of supplementary education to improving the quality of education. That is, regardless of the trend, it is difficult to go through the

educational process in one traditional classroom. Therefore, in order to provide high-quality modern education, the school administration needs to work closely with the administration of supplementary education institutions. As a result, we can conclude that the interaction of the general educational organization and the organization of supplementary education is a rather important component of education in general, since the integration of general and supplementary education is an effective solution to the problem of developing creative abilities in children of primary school age.

References

1. Евладова Е.Б., Николаева Л.А. О развитии и самореализации личности в процессе дополнительного образования в УВК: сельские учебновоспитательные комплексы: самореализация и развитие личности. сб. мат-лов. - Белгород: УОиБОИУУ, 1994.
2. Крутецкий В.А. Психология: учебник для учащихся педагогических училищ. - М.: Просвещение, 1980.
3. Голованов В.П. Педагогика дополнительного образования детей: учебное пособие. - Йошкар-Ола, 2006.
4. Куприянов Б.В. Социальное воспитание в учреждениях дополнительного образования детей. - М.: Академия, 2004.
5. Евладова Е.Б., Логинова Л.Г. Организация дополнительного образования детей. - М.: ГУЦ Владос, 2003.
6. Уторов О.Р. Влияние творческой среды учреждения дополнительного образования на самореализацию личности подростка. [Электрон. ресурс] – 2007 – URL: <https://cyberleninka.ru/article/n/vliyanie-tvorcheskoy-sredy-uchrezhdeniya-dopolnitelnogo-obrazovaniya-na-samorealizatsiyu-lichnosti-podrostka> (дата обращения: 17.11.2020).
7. Тен А.С. Новые тренды в современном образовании. Материалы республиканской научно-практической конференции на тему «Смарт-технологии в системе повышения квалификации: международный опыт и национальная практика», приуроченной к 25-летию Независимости Республики Казахстан. – Уральск, 2016.

References

1. Yevladova E.B., Nikolaeva L.A. O razvitii i samorealizatsii lichnosti v protsesse dopolnitel'nogo obrazovaniya v UVK: sel'skiye uchebnovospitatel'nyye komplekсы: samorealizatsiya i razvitiye lichnosti [On the development and self-realization of a personality in the process of supplementary education at the UVK: rural educational complexes: self-realization and personality development]. Compilation of materials (UOiBOU, Belgorod, 1994, 7-12 p.). [in Russian]
2. Krutetskiy V.A. Psikhologiya: uchebnik dlya uchashchikhsya pedagogicheskikh uchilishch [Psychology: a textbook for students of pedagogical schools] (Education, Moscow, 2000, 152 p.)
3. Golovanov V.P. Pedagogika dopolnitel'nogo obrazovaniya detey [Pedagogy of supplementary education for children]. Textbook (Yoshkar-Ola, 2006).
4. Kupriyanov B.V. Sotsial'noye vospitaniye v uchrezhdeniyakh dopolnitel'nogo obrazovaniya detey [Social education in institutions of supplementary education for children] (Academy, Moscow, 2004).

5. Yevladova E.B., Loginova L.G., Mikhailova N.N. Organizatsiya dopolnitel'nogo obrazovaniya detey [Supplementary education for children] (VLADOS, Moscow, 2002).
6. Utorov O.R. Vliyaniye tvorcheskoy sredy dopolnitel'nogo obrazovaniya na samorealizatsiyu lichnosti podrostka [Influence of the creative environment of the institution of supplementary education on the self-realization of the personality of a teenager]. Available at: <https://cyberleninka.ru/article/n/vliyanie-tvorcheskoy-sredy-uchrezhdeniya-dopolnitelnogo-obrazovaniya-na-samorealizatsiyu-lichnosti-podrostka> (Accessed: 17.11.2020).
7. Ten A.S. Novye trendy v sovremennoy obrazovanii. Materialy respublikanskoy nauchno-prakticheskoy konferencii na temu «Smart-tehnologii v sisteme povysheniya kvalifikatsii: mezhdunarodnyy opyt i nacional'naya praktika», priurochennoy k 25-letiyu Nezavisimosti Respubliki Kazahstan [New trends in modern education. Materials of a Republican scientific-practical conference on the theme of «Smart-technologies in the system of professional development: international experience and national practice» in celebration of the 25th anniversary of Independence of the Republic of Kazakhstan (Oral, 2016, 271-274 p.).

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Жалпы және қосымша білім беру ұйымдарының өзара іс-әрекеттерінің мәселелері туралы

Аннотация. Мақалада қосымша білім беру ұғымы және оның жан-жақты білім беру ұйымдарымен өзара әрекеті туралы айтылады. Авторлар мектеп оқушыларының оқу процесінде қосымша білім берудің ролі, функциялары және қажеттілігі туралы терең түсініктер береді. Мақала авторлары қосымша білім беру мүмкіндіктеріне қызығушылық танытпайтын студенттердің санын көбейту мәселесін көтереді. Авторлар өзін-өзі дамытуға деген қызығушылықтың төмендеуі және мұғалімдердің де, ата-аналар мен оқушылардың да мектептен тыс дамуға деген ынтасын жоғалту туралы жазып өтеді. Мұндай әлеуметтік жағдайдың туындауына әкеліп соқтырған көптеген себептер бар: бұл ата-аналардың қаржылық жағдайы, ата-аналардың назарының жеткіліксіздігі және балаларға деген қызығушылықтың төмендігі, сонымен қатар білім беру ұйымдары мен қосымша білім беру ұйымдарының өзара байланысының болмауы. Сонымен қатар, қазіргі білім берудің жаңа тенденцияларында қосымша білім берудің тиімділігіне терең талдау жасалды. Авторлар елдегі білім беру жүйесінде білім берудің осы екі түрінің өзара байланысының жоқтығына баса назар аударды. Мақаланың соңында авторлар принципіалды жаңа бағыттарды құру үшін стандартты сыныптарға жаңа компьютерлік техникалар мен әдістерді енгізу сияқты әдістемелік әдістерді ұсынады, мысалы, робототехника сабақтары немесе STEAM әдісі бойынша сабақтарды ұйымдастыру.

Түйінді сөздер: қосымша білім беру, жалпы білім беру, өзара іс-әрекет, білім беру ұйымдары, жаңа трендтер, қосымша білім беру мекемелері, робототехника, STEAM, сыныптас тыс оқу, қазіргі заманғы білім беру, білім беру жүйесін дамыту, білім беру жүйесі жақсарту және жаңарту.

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О вопросе взаимодействия организаций общего и дополнительного образования

Аннотация. В статье рассматриваются понятие дополнительного образования и его взаимодействие с организациями общего образования. Авторы подробно разъясняют роль, функции и необходимость дополнительного образования в учебном процессе школьников. Поднимаются проблемы увеличения количества учащихся, не проявляющих интерес к дополнительным образовательным возможностям, снижения интереса к саморазвитию и потери мотивации как со стороны учителей, так и со стороны родителей и учащихся к развитию вне школы. Причин, способствовавших созданию такой социальной ситуации, достаточно много: материальное положение родителей, недостаток родительского внимания

и незаинтересованность детей, а также отсутствие взаимодействия между образовательными организациями и организациями дополнительного образования. Также дан глубокий анализ эффективности дополнительного образования в новых тенденциях современного образования. Авторы подчеркнули отсутствие взаимодействия этих двух типов обучения в системе образования страны. В заключении статьи авторами предлагаются такие методические приемы, как внедрение в стандартные занятия новых компьютерных техник и приёмов для создания принципиально новых направлений, например, занятия по робототехнике или организация занятий по методу STEAM.

Ключевые слова: дополнительное образование, общее образование, взаимодействие, образовательные организации, новые тенденции, дополнительные учебные заведения, робототехника, STEAM, внеклассное обучение, современное образование, развитие системы образования, совершенствование и модернизация системы образования.

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