

ISSN: 2357-1330

https://doi.org/10.15405/epsbs.2019.09.02.58

# **EEIA 2019**

# International Conference "Education Environment for the Information Age"

# POTENTIAL OF SECONDARY SCHOOL SOCIAL SCIENCES IN FORMATION OF STUDENTS' "UNIVERSAL SKILLS"

Anna Lazebnikova (a), Tatiana Koval (b)\*, Olga Frantsuzova (c)
\*Corresponding author

- (a) Doctor of Education, Academician, Head of the Laboratory of Social and Humanitarian education, Institute for Strategy of Education Development of the Russian Academy of Education, Russia, alazebnikova@mail.ru
- (b) PhD in Education, senior researcher, Institute for Strategy of Education Development of the Russian Academy of Education, Russia, nastiakovalt@mail.ru\*
- (c) PhD in History, senior researcher, Institute for Strategy of Education Development of the Russian Academy of Education, Russia, frantsuzovao@mail.ru

#### Abstract

The article discusses the secondary school students' universal skills formation in the context of improving the quality and updating the content of school education. The concept of "universal skills" is used to denote a number of competences, the formation of which goes beyond a separate academic subject and ensures the success of a person in various activities. The paper shows that the methodical potential of school subjects and the implementation of the requirements of federal state educational standards create basic conditions for the formation of students' universal skills. The authors present the results of a study of the students' attitude towards the formation of universal skills in school. They conclude that there is a contradiction between the perceived need of students in the acquisition of universal skills and the low level of their assessment of the school ability to form them. Students do not consider school subjects to be the leading means of mastering universal skills. Comparing the results of students' survey and data obtained in the course of the teacher survey, the authors reveal shortcomings in the professional activities of teachers. The authors propose approaches to remove the contradiction in improving the methodological teachers' skills and in updating the structure of education by the usage of special educational interdisciplinary modules aimed directly at developing universal skills in students.

 $@\ 2019\ Published\ by\ Future\ Academy\ www.Future\ Academy.org.UK$ 

Keywords: Universal skills, education content, interdisciplinary module.



# 1. Introduction

Modern conditions of functioning and modernization of national systems of education have actualized the problem of goal-setting in education and led to the design of results that are directed to the future and are strongly related to the goals of sustainable development (Lazebnikova, 2000; Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning, 2006; Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training (ET 2020), 2009; Joint Report of the Council and the Commission on the implementation of the Strategic Framework for European cooperation in education and training (ET 2020) - 'Education and Training in a smart, sustainable and inclusive Europe', 2012; Miller, Shapiro, & Hilding-Hamman, 2008; UNESCO Education Strategy 2014–2021, 2014; Klarin, 2015; Burns, 2018).

A broad framework of ideas about the mission of the school as the most important institution for the socialization of the younger generation demanded elaboration in many ways (Serikov, 2012; Marinosyan, 2016; National Research Council, 2000). In domestic pedagogy, the researches related to the problems of updating the content of education and developing state educational standards reflect this challenge. The introduction of the Federal State Educational Standard of Secondary General Education in the early 2020s was planned to complete the transition of school to a new model of education. Direct orientation of standards to the achieved learning outcomes has become one of the most important vectors for the renewal of Russian general education. Learning outcomes include some goals that are stated in sources and literature in various terms: "universal skills", "core competencies", "21st century skills", "metadisciplinary skills", and, as it shown in a number of studies, these terms can be used as synonyms. (Frumin, Dobryakova, Barannikov, & Remorenko, 2018, p. 70).

The concept of "universal skills" is used in this study to denote a number of competences, the formation of which goes beyond the scope of a separate academic subject. Along with communicative competences, the competences of thinking stand out. The latter are expressed in a number of qualities and abilities, such as for analytical thinking, creative thinking, and possession of cognitive techniques: systematization, synthesis, highlighting the main thing, building classifications, decision making, etc. (New Vision for Education, 2015). The complex of these unspecialized skills and personal qualities is not related to a specific school subject educational area. It is responsible for flexibility of thinking, high efficiency and productivity of activities. Mastering and developing of this complex ensures the success of a person both in cognitive activity and in various social practices and can provide a full-fledged existence in a permanently and rapidly changing world (Fadel, 2008; Jacobson-Lundeberg, 2016; Bastian, 2017).

# 2. Problem Statement

In domestic pedagogy there are various approaches to the definition of the content of education and to the classification of different types of models of education (Modeli i struktury soderzhaniya obshchego srednego obrazovaniya: otechestvennyj i zarubezhnyj opyt: monografiya, 2012, p. 9-13). A new model of education is being proposed nowadays, which still exists as a combination of an unstructured goal and an ideal image. The situation is uncertain: calls for a change in the content of

education do not yet have support in specific operational characteristics that allow real transformations to

3. Research Questions

It can be assumed that future changes in the content of education will depend on many factors,

among which economic ones play a significant role. However, the effectiveness of the implementation of

innovations is always related to the human factor and the capabilities of the current model to perceive

innovations. Is there a possibility of changing the content of education without full rebuilding its

structure? In other words, can the "traditional" school subjects of the modern Russian education take on a

new content load?

4. Purpose of the Study

In this regard, the particular relevance for the formation of so-called universal skills acquires the

use of the potential of "traditional" subjects. So far, there are no studies a) that reveal the specificity of the

curriculum and content of a proposed model of education in comparison with nowadays practices, which

are under critics but actually still working, b) that determine the possibilities and risks of its

implementation in the educational process, c) that discuss the new structure of education taking into

account the existence of a set of "traditional" school subjects. The objectives of this study include

1. to identify the degree of students' demand for universal skills,

2. to give a preliminary assessment of the methodological capabilities of the subject "Social

studies" to form students' universal skills.

5. Research Methods

5.1. Student questionnaire. The questionnaire asks students about personal qualities and skills that

most researchers include in the group of universal skills, namely:

1. Teamwork in achieving a common goal.

2. Analytical thinking.

3. Critical thinking.

4. Self-presentation.

5. Independent time scheduling.

6. Independent planning of activities.

7. Independent decision making.

To identify the level of demand for universal skills, the personal experience of the final-year

students (the 11th grade, completion of school education) was examined. 474 respondents participated in

the survey (of which 15.1% were residents of Moscow; 68.1% were residents of the cities of Zhukovsky,

Mytishchi, Podolsk, Elektrostal; 16.8% were residents of the village named after Lenin)/ They filled out

the following questionnaire:

1) Which of the listed skills (universal skills, skills of the XXI century, life skills) need to be

formed during school years?

506

#### Select an answer option:

- 1 not needed at all
- 2 probably not needed
- 3 rather need
- 4 need
- 5 necessary
- 2) Who (or which organization) is responsible for their formation (that is, for you to master them)? Choose an answer option or give your own answer:
- teachers (school)
- parents (family)
- system of additional education (courses, etc.)
- You personally (explain the answer)
- nobody (explain the answer)
- 3) What do you think is hindering the formation of skills listed in the questionnaire among schoolchildren?
- 5.2. Comparative analysis of the data obtained during the survey of students, with the results of the survey of teachers, conducted in 2018 in the Center for Social and Humanitarian Education of the Institute for Strategy of Education Development of the Russian Academy of Education. The 2018 study examined the problem of the social disciplines teachers' attitude to the development of universal skills in students. Teachers were asked to rank the skills indicated in the questionnaire in order of importance for the formation in the process of teaching social studies (National Research Council, 2000). The skills proposed for teachers to rank were similar to the skills listed in the student questionnaires.
- 5.3. Analysis of the methodological potential of the school subject "social studies" on the basis of methodical component of "Social studies" textbooks under the requirements of the current Federal State Educational Standard (Federal'nyj gosudarstvennyj obrazovatel'nyj standart srednego obshchego obrazovaniya (10-11 kl.), 2012; Lazebnikova & Francuzova, 2018).

# 6. Findings

The data obtained in the course of the survey of students, were systematized in table 1 and table 2.

**Table 01.** Which of the listed skills (universal skills, skills of the 21st century, life skills) need to be formed during school years?

Skills (universal skills,	Necessity to be formed during school years (number of answers)					
skills of the 21st century, life skills)	1 not needed at all	2 probably not needed	3 rather need	4 need	5 necessary	
Teamwork in achieving a common goal	2	7	66	199	202	
Analytical thinking	-	11	46	153	264	
Critical thinking	4	17	45	153	257	
Self-presentation	4	30	86	164	190	
Independent time	8	9	35	181	241	

Selection and peer-review under responsibility of the Organizing Committee of the conference

eISSN: 2357-1330

scheduling					
Independent planning of activities	6	9	25	190	244
Independent decision making	3	7	26	106	233

The analysis of student responses indicates that high school students are aware of the importance of universal skills. Possession of the skills of analytical and critical thinking is most valued. This can serve as an indicator of high motivation of students to intensify educational activities aimed at mastering cognitive literacy. The least appreciated is the ability for self-presentation. Probably, this quality is associated by some respondents with manifestations of too high ambitions, excessive self-esteem and a kind of selfishness, and it is not approved as a desire to present oneself in the most favorable light without a sufficient number of reasons. The obtained data are comparable with the results of the teacher survey. The teachers' ranking of the skills shows that they assess the ability to interact; make decisions independently; critical thinking and analytical thinking as the most significant in social relations and practices and, accordingly, for the formation in school. The least importance, in the opinion of the teacher respondents has the skill of self-presentation. So according two surveys the teachers and students have close opinion on the importance of mastering of universal skills.

**Table 02.** Who (or which organization) is responsible for their formation?

Skills (universal skills,	Responsibility for their formation lies on					
skills of the 21st century, life skills)	Teachers (school)	Parents (family)	System of additional education (courses, etc.)	You personally	Nobody	
Teamwork in achieving a common goal	171	84	39	225	-	
Analytical thinking	198	96	45	246	-	
Critical thinking	144	132	52	237	-	
Self-presentation	60	98	15	306	10	
Independent time scheduling	75	98	-	254	-	
Independent planning of activities	72	131	7	339	-	
Independent decision making	36	143	10	320	-	

However, recognizing the importance of universal skills, students place the responsibility for mastering them, first and foremost, on themselves. On the one hand, this fact can be regarded as a manifestation of a certain personal maturity. In this regard, the pupils' explanations are of interest (the quotes that preserve the vocabulary and style of the answers are given below and further): "Why did I write everywhere "I am responsible"- I answer: without a preliminary positive attitude everything which is going after is absolutely useless. We are also responsible for the formation of negative attitudes, even under the impetus of society." On the other hand, a low assessment of the school role indicates that the system of education has not yet developed enough in the direction of a full-fledged formation of the universal skills.

Answering the questions of the questionnaire №№ 2 and 3, the students wrote:

"Analytical thinking and the ability to look at a problem from different points of view are not available to all teachers",

"The school does not do well with all the qualities. Most qualities do not develop at all purposefully, they are not taught as a separate subject",

"The school stops preparing children for the future life due to the transformation of educational institutions from an important stage in the life of any person to a service center that does not affect the future life of the student",

"In most cases, the school does not cope, because they (school management, the Ministry of Education) put the study of the school program in the first place",

"In most cases, the school does not provide the necessary vital knowledge and skills, the reason for the teachers, indifference on their part, unwillingness to hear and understand the students."

Schoolchildren do not see a focused, systematic approach to the formation of universal skills in the activities of teachers and extrapolate their observations to the educational system as a whole. The critical comments made by the respondents indirectly confirm the conclusion that the potential of school subjects in general and the subject "Social Studies", in particular, in the formation of universal skills can be used more effectively. An analysis of the methodical component of social science textbooks indicates the possibilities that currently exist to eliminate the identified shortcomings.

In recent years, much has been done to equip the educational process with new materials and tools, which, in particular, make it possible to develop students' analytical and critical thinking more effectively. Teachers in the mass practice of teaching social sciences can use various methods, based on the potential of their school textbooks. Analysis of the methodical component of the updated social science textbooks shows a significant increase in the proportion of tasks aimed at applying acquired knowledge and skills in new non-standard situations and supporting participation of students in project making. For example, the set of tasks under the heading "Use your knowledge" is presented after each lesson in social science textbooks for the basic school level (Leksin & Chernogor, 2019); the set of assignments for 8th grade students on the topic "Education" guides the project "Our proposals for changing the education system in basic school (grades 5–9)" (Bogolyubov et al., 2016, p. 86): students asked to conduct a survey of classmates, find out their proposals for changing the curriculum and content of school subjects, the practice of performing assignments, the assessment system, and prepare a presentation on the topic.

An important direction of teacher's professional development is an interdisciplinary practice, in which special teaching aids for students can be used, focused on interdisciplinary (metadisciplinary) tasks. Among them there are tasks that contain comprehensive information to perform the necessary actions. Failure to perform the task is not related to the acquisition of knowledge; it means that a student has not mastered a certain universal skill. For example, an assignment for a basic school students: "We know two forms of government — monarchies and republics. In the republics, presidents and parliaments are elected by the population for a limited time. In monarchies, the head of state usually inherits power and rules the state for lifelong term. In the modern world, of the 194 states recognized by the UN as independent, about 30 are monarchies. Identify all the lines by which you can compare the two forms of

government, conduct a comparative analysis based on these conditions". This task can be used both for the formation of the analytical thinking and to diagnose the level of its formation.

Several students who participated in the survey note that a special subject will allow them to concentrate on the formation of universal skills. Thus the introduction of special educational modules into practice is a promising direction of curriculum modernization (Vorovshchikov, 2018; Koval, Kryuchkova, Lazebnikova, & Dyukova, 2017). The module "Practice of Cognition" is another way to develop universal skills based on analytical and critical thinking. It is aimed at improving the cognitive experience of high school students, developing reflection in cognitive activity, meaningful and purposeful application of logical thinking operations and acquired knowledge. For example, at one of the lessons, students are invited to discuss what is in common and which differences are in the preparation for and participation in a discussion, dispute or in debates; when writing a mini-essay, annotation or abstract. Using a special training unit to develop universal skills helps students to overcome their shortcomings and to learn more productively for their future.

# 7. Conclusion

The study showed a contradiction between the perceived need of students for the acquisition of universal skills and their attitude to the ability of the school to solve this problem. At the same time, the methodological potential of certain school subjects, in particular, the modern courses of social studies, as well as the implementation of the requirements of federal state educational standards, create basic conditions for the development of these skills among students. Students do not consider school subjects to be the leading means of mastering universal skills. In this regard, the situation can be improved and school opportunities can be strengthened both by changing in the attitude of teachers to the potential of school subjects, and by incorporating into curricula special training modules aimed directly at developing universal skills.

# Acknowledgments

This paper is prepared as part of the state assignment of the Institute for Strategy of Education Development of the Russian Academy of Education, No. 073-00086-19-01 for 2019 and for the planning period 2020 - 2021. The project "Scientific and methodological support of the revision and implementation of the Federal state educational standard of secondary education (№ 073-00086-19-01)."

#### References

Bastian, J. (2017). Leistungsbewertung und Vielfalt. Paedagogik, 9, 3.

Bogolyubov, L.N., Gorodeckaya, N.I., Ivanova, L.F., Basik, N. Yu., Kinkulkin, A. T., Kotova, O. A., Liskova, T. E., Matveev, A. I., & Rutkovskaya, E. L. (2016). *Obshchestvoznanie*. 8 klass: uchebnik dlya obshcheobrazovatel'nyh organizacij [Social Studies. Grade 8: textbook for educational institutions]. Moscow: Prosveshchenie. [In Rus.].

Burns, E. A. (2018) Giving Students Respect: One of the Great Soft Skills of Teaching and Learning. *Issues and Ideas in Education*, 6(1), 41–61.

Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training (ET 2020). (2009). *Official Journal of the European Union*, 119, 2-10. Retrieved from:

- URL:https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009XG0528(01)&from=EN.
- Fadel, Ch. (2008). 21st Century Skills: How can you prepare students for the new Global Economy? Paris: OECD/CERI.
- Federal'nyj gosudarstvennyj obrazovatel'nyj standart srednego obshchego obrazovaniya (10-11 kl.) (2012). [Federal State Educational Standard of Secondary General Education (Grade 10-11)]. Retrieved from: https://xn--80abucjiibhv9a.xn-p1ai/%D0%B4%D0%BE%D0%BA%D1%83%D0%BC%D0%B5%D0%BD%D1%82%D1%8B/2 365 [In Rus.].
- Frumin, I.D., Dobryakova, M.S., Barannikov, K.A., & Remorenko, I.M. (2018) *Universal'nye kompetentnosti i novaya gramotnost': chemu uchit' segodnya dlya uspekha zavtra. Predvaritel'nye vyvody mezhdunarodnogo doklada o tendenciyah transformacii shkol'nogo obrazovaniya* [Universal competence and new literacy: what to teach today for success tomorrow. Preliminary findings of the international report on trends in the transformation of school education]. Moscow: NIU VSHE. [In Rus.].
- Jacobson-Lundeberg, V. (2016). Pedagogical Implementation of 21st Century Skills. ERIC. *Educational Leadership and Administration: Teaching and Program Development*, 27, 82-100. Retrieved from: URL: https://eric.ed.gov/?id=EJ1094407.
- Joint Report of the Council and the Commission on the implementation of the Strategic Framework for European cooperation in education and training (ET 2020) 'Education and Training in a smart, sustainable and inclusive Europe'. (2012). *Official Journal of the European Union, 70*, 9-18. Retrieved from: URL: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52012XG0308(01)&from=EN.
- Klarin M.V. (2015). Didaktika 21 veka i vyzovy sovremennogo obrazovaniya [Didactics of the 21st century and the challenges of modern education]. *Otechestvennaya i zarubezhnaya pedagogika*, 5(26), 97-108. [In Rus.].
- Koval T.V., Kryuchkova E.A., Lazebnikova A.Yu., & Dyukova S.E. (2017). Metapredmetnyj kurs "Poznavatel'naya deyatel'nost" [Meta-subject course "Cognitive activity"]. *Prepodavanie istorii v shkole*, *9*, 62-70. [In Rus.].
- Lazebnikova, A.Yu. (2000). *Sovremennoe shkol'noe obshchestvoznanie. Voprosy teorii i praktiki* [Modern school social studies. Questions of theory and practice]. Moscow: Shkola-Press. [In Rus.].
- Lazebnikova, A.Yu., & Francuzova, O.A. (2018). *Uchebnik obshchestvoznaniya: ehtapy, faktory i napravleniya obnovleniya* [Textbook of social studies: stages, factors and directions for updating]. *Cennosti i smysly, 5,* 73-86. [In Rus.].
- Leksin, I.V., & Chernogor, N.N. (2019). *Obshchestvoznanie: uchebnik dlya 8 klassa obshcheobrazovatel'nyh organizacij* [Social Studies: a textbook for grade 8 of educational institutions]. Moscow: OOO "Russkoe slovo uchebnik". [In Rus.].
- Marinosyan, T.E. (2016). Obrazovanie i prognozirovanie v obrazovanii v ehpohu post-post... [Education and Forecasting in Education in the Era of Post-Post...] *Filosofskie nauki*, 11, 69-81. [In Rus.].
- Miller, R., Shapiro, H., & Hilding-Hamman, K. (2008). *School's Over: Learning Spaces in Europe in 2020: An Imagining Exercise on the Future of Learning*. Report for the European Commission, Institute for Prospective technological studies. http://dx.doi.org/10.2791/54506.
- Modeli i struktury soderzhaniya obshchego srednego obrazovaniya: otechestvennyj i zarubezhnyj opyt: monografiya. (2012). [Models and structure of the content of general secondary education: domestic and foreign experience: a monograph]. Moscow: Sankt-Petersburg, Nestor-Istoriya. [In Russ.].
- National Research Council (2000). *How People Learn: Brain, Mind, Experience, and School: Expanded Edition.* Washington, DC: The National Academies Press. https://doi.org/10.17226/9853
- New Vision for Education (2015). *Unlocking the Potential of Technology. World Economic Forum report*. World Economic Forum.

- Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning. (2006). *Official Journal of the European Union, 394*, 10-18. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006H0962&from=EN.
- Serikov V.V. (2012). *Razvitie lichnosti v obrazovatel'nom processe: monografiya* [Personality development in the educational process: monograph]. Moscow: Logos. [In Rus.].
- UNESCO Education Strategy 2014–2021. (2014). UNESCO.
- Vorovshchikov S.G. (2018). Elektivnyj metapredmetnyj kurs «Osnovy proektnoj i issledovatel'skoj deyatel'nosti»: soderzhatel'nye i metodicheskie osobennosti [Elective meta-subject course "Fundamentals of project and research activities": content and methodological features]. In Nauchnaya shkola T.I. Shamovoj: metodologo-teoreticheskie i tekhnologicheskie resursy razvitiya obrazovatel'nyh sistem: Sbornik statej X Mezhdunarodnoj nauchno-prakticheskoj konferencii «Shamovskie pedagogicheskie chteniya nauchnoj shkoly Upravleniya obrazovatel'nymi sistemami» (pp. 524-528). Moscow: MPGU. [In Rus.]