THE ROLE OF INTERACTIVE METHODS IN TEACHING SOCIAL SCIENCE FOR DEVELOPING THE RESEARCH COMPETENCE

[a]ELENA N. CHEKUSHKINA, [b]ELENA N. RODINA, [c]IRINA B. BUYANOVA, [d]DIANA V. ZHUINA

[a, b,c,d]*Mordovian State Pedagogical University named after M. E. Evseviev, Studencheskaya str., 11 A, Saransk, Russia, 430007*
email: [a]elenachekushkina@yandex.ru,
[b]rodina197621@rambler.ru , [c]ibbuyanova@yandex.ru,
[d]dianazhuina@yandex.ru

Abstract: Today, the current education policy in our country provides for the phased self-development of student's personality aimed to develop their framework of applied research and value orientations. The modern school strives to intensify the process of training and education by implementing various innovative technologies. Thus, the use of interactive training methods is an effective way to develop different competences, such as, for example, the research competence implying the ability to make hypotheses, build the research plan, select most appropriate methods by examining literature and systemizing the collected data. It seems logical that the development of a research competence is possible through the school subject Social Science, as its content implies self-reflection and perception of own self as a part of community.

Keywords: research competence, interactive methods, competence-centered approach, project methods, discussion, debates, business games.

1 Introduction

Presently, the development of research competence is highly relevant, as the informational society places ever changing demands on each and every person, since the resource of information gains ultimate importance. Everybody should be able to handle different kinds of information, to identify problems, to find and assess possible ways to solve them. Until recently it was assumed that the research skills were needed only by those who work in universities and research and development centers, while now such skills are becoming integral to every profession (Chekushkina et. al., 2020).

The course of social science is highly important for establishing essential elements of social, moral, legal, economic, and political culture, since practical orientation and the possibility to apply the acquired knowledge and skills for solving problems in public life are the main objectives of the course.

As shown by practice, students experience the major problems when dealing with the tasks related to searching for, analyzing and systematizing social information, making judgements and reasoning, using examples to illustrate the studied theoretical postulates (Shamigulova, 2013).

The methods of interactive learning may be useful in addressing such problems, as they engage various psychic processes, thus boosting creative thinking and in general invigorating it. At the emotional level, a positive attitude to solving problems develops. The situations of success, that are phased, strengthen the intrinsic motivation, giving rise to a desire to continue a specific type of activity bringing it further than was initially required (Nilson, 2010). The cognitive processes strengthen analytical skills, imagination and help to overcome the inertia of thinking (Chekushkina & Rodina, 2015).

The use of such methods of training as discussion, debates, business games, project method fuels the development of research competence and in general facilitates implementation of the personality-centered training.

2 Literature Review

Amidst profound social changes, our state puts forward new imperatives for the education of citizens. Nowadays, the competence-centered approach has been proclaimed in the educational process, which is a modern approach to the process of learning and modernization of education.

The competence approach in education has been studied by different scholars such as I. A. Zimnyaya (2004), O. E. Lebedev (2004), A. V. Khutorskoy (2003) and others.

This approach implies independence in setting the goals of cognitive activity, selecting information sources, explaining cause-effect relations, choosing directions in all areas of life, etc. (Safonova et. al., 2020).

According to A. A. Verbitsky (2009), "the ultimate goal of competence-based education is not the acquisition of a certain amount of knowledge in the disciplines studied at school, but the acquisition of certain competences and building of general competency" (p. 81).

According to modern scholars of education, today the acquisition of different competences gives the ability to respond quickly to the problems of society. Various authors put their own meaning in the content of this concept. For instance, A. V. Khutorskoy (2003) offers the following interpretation: "competence is a combination of interrelated qualities of personality which reflect requirements to the quality of education of graduates" (p. 59).

Doctor of Science in Pedagogy G. S. Vyalikova (2006) defines competence as "informational awareness, profound knowledge of a particular subject, on the one hand, and the range of certain powers, rights, on the other hand" (p. 29).

In V. M. Polonsky's (2004) dictionary, the following definition is provided "competence is a sum of certain knowledge, skills and abilities in which a person should be proficient and should have practical experience" (p. 45).

Having examined some explanations of the concept "competence", we may see that as yet there is no single interpretation, while on the basis of the above definitions a conclusion can be made that the concept "competence" is based on different key aspects: "a combination of personal qualities", "informational awareness", "readiness to take action", "an alloy of knowledge, abilities, skills and personal characteristics of a student" (Weinert, 1999, p. 35).

In the system of school education, the competence-centered approach is developed by A. V. Khutorskoy (2003). He identified a range of competences that every schoolchild should obtain: value-meaning, general cultural, learning and cognitive competences, communicative, social-labour competences, personal self-improvement competences, and information competences (Khutorskoy, 2003).

The research competence belongs to the group of information competences. At present time, there exist many points of view on the definition of this concept differing in what constitutes the core of the definition.

Doctor of Science in Pedagogy, A. V. Barannikov (2008), defines research competence as a combination of skills in receiving and processing the information, finding various sources of information and using them in practice, systematizing information in independently organized activities. These skills, in his opinion, can be developed through any of the academic subjects.

Russian psychologist and educator A. I. Savenkov (2008) believes that "research competence is a special functional system of psyche with its associated holistic set of human qualities which help a person to become an efficient subject of activity» (p. 32).

Based on the analysis of the given definitions of the concept "research competence", we understand under this concept, the necessary quality of the learner, including knowledge, abilities and skills, aimed at the development of research abilities, as well as the drive for self-education.

Using the scheme of research competence of a teacher proposed by E. V. Nabieva (2008) and the list of the most important characteristics, it is important to highlight the main components of research competence: cognitive (gnostic), motivational-personal, intellectual-creative and substantive-operational.

Development of research competence occurs through implementation of research activity by students, which boosts their intellectual potential when they apply their knowledge in practice and produce something new. Engagement of high school students in research activities sparks their cognitive interest, teaches them to predict their actions and deeds (Habermas, 1995).

As a result of phased efforts that include identifying the technologies to be used in the project, structuring the materials on the topic of research, presentations during lessons in the form of reports, messages, essays followed by discussion, analysis and systematization of all obtained data, students study the academic topic in more detail and consistently, mastering the basics of research activities.

An important role in the development of research competence belongs to the writing of essays. The topics of social science essays are usually the statements of famous people which represent five branches of knowledge: philosophy, economics, social psychology/sociology, political science, and law. Writing essays implies a complex analytical work, as students have to reveal the meaning of the statement, relying on social science terminology, and using scientific theories to prove the proposed theses, while citing examples from different sources (Chekushkina et. al., 2016).

Students can also be given assignments of the cognitive type: find a website on the topic and write a review; make a presentation or a summary on the lesson's topic; find three pictures or diagrams on the topic and prepare assignments to them.

3 Research Methodological Framework

The purpose of this research is to determine the most efficient methods of interactive training used at the social science lessons at school for developing the research competence.

The research objectives include:

1. analyzing the group interactive methods: discussion, debates;
2. assessing the heuristic potential of business games;
3. examining the project method and developing recommendations regarding its use at the social science lessons.

The research employed the range of methods: theoretical (study and analysis of the scientific literature, systematization of effective methods that help to strengthen the students' research competence; comparative which help to get the knowledge of the essence of various interactive methods for teaching children at social science classes.

4 Results and Discussion

The term "interactive" means a dialogue, an interaction with someone (a person) or something (for example, a computer). Interactive learning implies a dialogue interaction between a teacher and a student.

The primary objectives of interactive learning include the development of skills of independent search for, analysis and evaluation of information, formation of one's own opinion and

reinforcement of teamwork skills. Interactive learning helps to increase the amount of information learnt by students (Izmailova & Kuznetsova, 2013).

Interactive learning requires teachers to be independent and self-organized. The teacher should clearly define the goals of the learning process and ensure that the learners receive and perform the following:

- knowledge: recognize and reproduce special information;
- understanding: understand the meaning of any message;
- application: apply the acquired knowledge without being told to do so;
- analysis: breaking down the material into structural parts and gaining its understanding;
- synthesis: connecting separate studied elements into a single whole;
- evaluation: developing and forming value judgments about solutions, ideas, methods, etc. (Bermus, 2005).

It is worth noting that the primary role as concerns the use of interactive teaching methods at school belongs to organizing the group form of learning.

A feeling of community in the group, in our opinion, arises during a special lesson warm-up. Students are offered two or three exercises for attention concentration. The next stage of interactive learning consists in organizing the learning activities of students within a group. At this stage, the tasks offered to the class differ by a non-standard problem presentation urging students to seek help from each other, to share their points of view with each other. The tasks may be different, for example, to choose from the numerous qualities those which, in the common opinion, characterize the subject, phenomenon, etc. most precisely.

Learning interaction and cooperation should be organized in two forms: Teacher - Learner and Learner - Learner.

Today a rather high number of group interactive methods, for example, discussions, are used in practice. For a group discussion the class is divided into micro groups, each defending its point of view on the problem discussed. For example, the topic "Family and Relationships". Problematic questions on the topic: "Why do people get married? Is it necessary to regulate the age difference for people willing to get married? What can be the reasons for divorce? Does it make sense to ban divorces?"

In the course of a discussion, students analyze the information presented, critically reflect on it, and make conclusions based on the previously studied material. Cause-and-effect relationships underlie the reasoning. Work in small groups stimulates imagination, motivates, and fosters a sense of responsibility, since each participant understands that all others pin their hopes on him/her for progressing toward solution of the problem.

The primary role in preparation of the lesson-discussion belongs the teacher who is supposed to consult the students. The discussion begins with the introductory words from the teacher, who formulates and explains the main problem of the lesson, and establishes the rules for conducting the discussion. Then each of the groups discusses the task, after which the discussion participants make their speeches.

When holding the lesson-discussion, the teacher should not interrupt the speakers and interfere in the discussion, but he/she should be providing guidance to students in their contemplations helping them to reach the right conclusions and to reach the consensus view on the issue in question. Group activities, such as discussion and debates, help to develop independent thinking, skills of cooperation and communication (Habermas, 1995).

During debates the class is divided into two teams, they discuss a given topic, which is announced by the teacher in the form of a thesis, and provide their convincing argumentation. One team supports the thesis and the other team refutes it. In the process, participants in the debate develop the ability to present their

point of view, based not only on their own conclusions, but on known documented facts.

The following topics of debates in high school may be suggested: "Labor Migrants in Russia"; "Market Economy in Russia: Good or Evil?"; "Teenager's Life in the 21st Century Has Become Easier than Before"; "The Changing Role of Women in Society". The main thing in this method is to have two teams, presenting arguments and counterarguments based on convincing proof-points in the form of quotations, statistical data, and examples.

In the classroom most often such types of debates are used as problem debates, which convey to students' various concepts touching upon the most important problems of the course. Express debates are based on the materials of the textbook or the teacher's story for consolidation of the studied content or for boosting cognitive activity in the classroom.

It is also possible to organize debates that involve students' work with various documents that will teach students how to logically analyze scientific sources of information. For example, in order to prepare for the debate on the topic: "Will stricter sentences lead to the lower crime levels in our country?" students are expected to look through scientific publications, statistical data, and mass media.

Debates can be used as a technology for revisiting and summarizing everything learned at the lesson (Shibaev, 2012). For example, the topic "Family and Relationships". Problematic questions on the topic may include: "Why do people get married? Is it necessary to regulate the age difference for people willing to get married? What can be the reasons for divorce? Does it make sense to ban divorces?"

The game as an interactive method has an immense potential for building research competence as it creates exploratory situations, offering the challenge of selecting, analyzing and evaluating the information needed to solve the pending problems. It is possible to use games that take little time, such as brain-twisters, quizzes, crosswords.

Business games are of a particular importance at social science lessons because through them students learn different social roles, such as banker, politician, salesman, lawyer, etc., which brings learning more relevant to reality, requiring them to interact, express creativity and initiative (Buyanova, 2013). Children's participation in such games is an important part of their socialization, as it gives them the opportunity to get a glimpse into a vein of possibilities offered by certain activity or profession, helps them to get included in the system of social institutions (Butcher, 1993). A business game can be conducted at different stages of learning, for instance, as a generalization lesson before proceeding to a new topic.

Business games should be based on the following algorithm: selecting the game topic→ defining the game objectives and methods to reach them→ developing a script and a game plan → preparing necessary aids and didactic materials→ dividing participants into teams → assigning roles → preparing necessary paraphernalia and decorating space for the game→ the game itself (the main stage)→ the final stage (analysis, assessment and self-assessment, conclusions, generalizations, recommendations).

Introduction of games as a way to support the learning process makes it possible to maintain unfading interest in the content of the studied course, in the learning itself, to invigorate creativity, to develop and strengthen practical skills, to gain a better understanding of the relationship between theory and practice (Mikhalkina et. al., 2018).

Today, due to transition to new educational paradigms, the project method draws more and more attention, since the named pedagogical technology is in high demand and implies independent efforts of students in searching for information and analyzing it. Project technology in the classroom implies that students "live through" a certain period of time in the learning process, thereby contributing to a deeper understanding of Russia's past and present, teaching them to analyze a particular problem or task that has emerged at a certain stage of societal development (Kuznetsova et. al., 2020).

Through project activities they learn to make their own judgements and develop critical thinking, integrate different types of activities, and make the learning process more exciting, interesting and effective.

Projects can be of the following types: research, informational (familiarizing-orientating), role-playing, applied (practice-oriented), creative.

When conceiving topics for projects, the teacher should take into account the study program in a particular class, as well as the age and interests of students. So, in the fifth and sixth grades the children may find interest in the topics related to the rights of children, various professions, family, while more relevant for high school students are such topics as "Youth Subcultures", "Juvenile Delinquency", "Mass Culture", "Special Considerations about Conclusion and Termination of Employment Contracts", "Prenuptial Agreement", etc. (Chekushkina et. al., 2020).

Educational projects require students to examine and systematize many various sources of information. Project work may be carried out by schoolchildren in various forms and may include: search for the necessary information in the library, mass media, over Internet, conduction of questionnaire surveys, polling, interviews with participants of social processes, representatives of various social groups. Different stages in the project are geared toward achievement of personal, subject and meta-subject results.

Students in the lesson should focus on identifying differences in studies on the same problem predetermined by the scientific views and interests of their authors, and defining clear criteria for selecting relevant material.

The observation projects may be effectively used at social science lessons. For example, observations over people of different professions which outcome may be a verbal story, a drawing, or photographs. The success in the project is a stimulus that will inspire students to take up other projects independently and spur their personal development. The use of the project method is responsive to the needs and imperatives of the modern society: the ability to formulate objectives; to make own autonomous decisions; to embrace individual potential and unlock capabilities.

High school students can make an alternative scenario for the development of society, both in all or in some areas: politics, economics, culture. For example, after completion of a secondary school course students may be offered such a topic as "Russia in 2025". The teacher and the class will then choose a scenario of the country's development and will start working with this educational project. Such projects will be understandable to today's schoolchildren, as they will fit perfectly into their way of life (in many respects already dependent on computer technologies and games), because such projects actually represent a virtual model of development.

In general, the following benefits of the project method may be highlighted:

- acquisition by schoolchildren of useful skills and abilities through exploratory activities;
- finding out different points of view on one and the same topic or problem;
- strengthening the ability of students to use the scientific research methods.

Interactive learning becomes an effective vehicle to accomplish objectives consisting in the development of general learning skills and promotion of joint activities.

In today's education, the role and importance of those forms of learning that sustain strong interest and engagement of students in the learning process is increasing. There exist many different interactive forms of lessons: discussion, debate, project method, etc.

Through the dialogue interaction students develop empathy and ability to self-cognition. The group work helps to organize cooperation for accomplishing the pursued objectives. Interactive methods imply broad cooperation between students and between students and a teacher. Teacher should encourage students to take the lead, stimulating them to independently fulfill the intended objectives. Interactive methods are highly efficient for developing the ability of students to self-actualization, as they catalyze their hidden potential, and help to find ways toward the ultimate goal. Create the learning space where students become willing to acquire new knowledge independently, and to apply it later in practice (Zhuina, 2014). Enhance learning motivation, enrich personal experience, facilitate self-development, help to develop communication skills, invigorate inner resources of students, and create a friendly and optimistic atmosphere.

5 Conclusion

Thus, we believe that upon emergence of the competence-centered approach in educational space, the ultimate goal of learning is no longer the accumulation by students of a certain amount of knowledge on academic subjects, but the development and strengthening of certain key competences of students, including research competence, which is reduced to an organic synthesis with the obtained knowledge and the skills of its use in educational and real-life situations. Research competence is aimed at solving urgent problems with reliance on the acquired knowledge and life experience. Its level among students depends on how productively the general education facility organizes the research activities.

Social science lessons at school provide ideal ground for using such interactive methods of learning as discussion, debates, business games, project method, which boost creative thinking and other qualities: creativity, flexibility, ability to find non-standard solutions, to go beyond stereotypes, perfectionism.

Lessons organized with the use of the above methods spark noticeable interest in students. They break the ordinary pattern of a lesson, allow each student not only to be a passive listener, but also to take the active part in organizing the educational process. The described methods help to embrace the potential of all students, provide everybody an opportunity for self-fulfillment through problem solving, which ultimately results in enhanced motivation for research activities.

Literature:

1. Barannikov, A. V.: *The Content of General Education: Competence-Centered Approach*. Moscow: Moscow Center for Education Quality, 2008. P.142.
2. Bermus, A. G.: *Problems and Prospects of Implementing the Competence-Centered Approach in Education.* Eidos. Internet journal, 4, 2005. Available from http://www.eidos.ru/journal/2005/0910-12.htm.
3. Butcher, Ja.: *Socialization of Children's Playground Skill.* Perceptual and Motor Skills, 77, 1993. 731–738 pp.
4. Buyanova, I. B.: *Analysis of the Level of Students' Adaptation to the University Environment.* Middle East Journal of Scientific Research, 17(9), 2013. 1237–1242 pp.
5. Chekushkina, E. N., Rodina, E. N., Martinova, E. A., Ryabova, E. V.: *Opportunities for Upgrading Educational Personnel's Qualification through Distance Learning Courses in Philosophy.* Ad Alta: Journal of Interdisciplinary Research, 10/02(XIV), 2020. 129–132 pp.
6. Chekushkina, E. N., Rodina, E. N., Veldina, I. A.: *Interactive Forms and Methods of Teaching Children at Social Science Lessons.* Humanities and Education, 11(4), 2020. 101–105 pp.
7. Chekushkina, E. N., Rodina, E. N., Martinova, E. A, Kostina, R. G.: *Innovative Resource Dynamics in Pedagogical Higher Educational.* Rupkatha Journal on Interdisciplinary Studies in Humanities, Special Issue, 2(8), 2016. 137–146 pp.
8. Chekushkina, E. N., Rodina, E. N.: *Socio-Philosophical Substantiation of Making Good Use of Intellectual and Creative Resources in a Teachers's Training Institution of Higher Education.* Asian Social Science, 6(11), 2015. 111–117 pp.
9. Habermas, J.: *Moral Consciousness and Communicative Action.* Cambridge: MIT Press, 1995. P. 225.
10. Habermas, J.: *Theory of Communicative Action.* Cambridge: Polity Press, 1995. P. 465.
11. Izmailova, E. A., Kuznetsova, Yu. A.: *Models, Systems, Networks in Economy.* Technology, Nature and Society, 2 (6), 2013. 32–35 pp.
12. Khutorskoy, A. V.: *Key Competences as a Component of Personality-Oriented Paradigm of Education.* Public education, 2, 2003. 58–66 pp.
13. Kuznetsova, N. V., Maslova, S. V, Chiranova, O. I., Yankina, L. A.: *Formation of Younger Schoolchildren's Academic Motivation in the Process of Extracurricular Project Activity.* International Journal of Applied Exercise Physiology, 9 (2), 2020. 126–133 pp.
14. Lebedev, O. E.: *Competence-Centered Approach in Education.* School technologies, 5, 2004. 3–12 pp.
15. Mikhalkina, S. A., Khudyakova,T. L., Pozharskaya, E., Pronina, E. V., Dedo, N. P., Zhelezniakova, M. E., Karpova, E. E.: *The Phenomenon of a Game and its Psychological and Pedagogical Resources.* Modern Journal of Language Teaching Methods, 8, 2018. 56–63 pp.
16. Nabieva, E. V.: *Monitoring Development of the Teacher's Scientific Research Competence.* Standards and monitoring in education, 5, 2008. 13–17 pp.
17. Nilson, L. B.: *Teaching at its Best: a Research-Based Resource for College Instructors.* San Francisco: Jossey-Bass, 2010. P. 400.
18. Polonsky, V. M.: *Dictionary on Education and Pedagogy.* Moscow: High school, 2004. P. 512.
19. Safonova, L. A., Voinova, I. V., Procenko, S. I.: *The Use of Competence – Based Approach in Future Teacher Training for Educational Content Development in Mathematics and Computer Science Subject Field.* International Journal of Applied Exercise Physiology, 9(2), 2020. 63–72 pp.
20. Savenkov, A. I.: *Content and Organization of Research Training of Students.* Moscow: September, 2008. P. 204.
21. Shamigulova, O. A.: *Education in Social Science Amidst Transition to New Federal State Standards of General Education: Current Status and Development Prospects.* Pedagogical Journal of Bashkortostan, 3–4(46–47), 2013. 55–60 pp.
22. Shibaev, V. P.: *Approaches to Implementing Ideas of a New Educational Paradigm in the Innovative University.* World of science, culture, education, 2(33), 2012. 173–175 pp.
23. Verbitsky, A. A.: *Competence-Centered Approach: Problems and Implementation Conditions.* Innovative projects and programs in education, 2, 2009. 81–84 pp.
24. Vyalikova, G. S.: *Pedagogical Stimulation of Professional Competence of a Teacher through Extra-Mural Form of Study*: Abstract of thesis by the Doctor of Science in Pedagogy. Ryazan: Ryazan State Pedagogical University named after S. A. Esenin, 2006. P. 29.
25. Weinert, F. E.: *Concepts of Competence*. 1999. Available from https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.111.1152&rep=rep1&type=pdf
26. Zhuina, D. V.: *Diagnostics of Career Orientation Peculiar for the Personality of Pedagogy Students.* Life Science Journal, 11(8), 2014. 586–589 pp.
27. Zimnyaya, I. A.: *Key Competences, a New Paradigm of Education Results.* Higher Education Today, 5, 2004. 38–40 pp.