

PRIMARY EDUCATION: PSYCHOLOGICAL AND PEDAGOGICAL ASPECTS OF FORMING THE FOUNDATION OF A COMPETENT PERSONALITY

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Abstract: This article aims to reveal the technology of forming key competencies for primary school students. Primary school is an organic part, the first stage of secondary school. It is in it that the foundation is laid for the subsequent stages of education. The reform provided for obvious educational goals and objectives for the primary grades: to lay the foundations for the comprehensive development of children, to ensure the formation of solid numeracy skills, literate writing, developed speech, and cultural behavior. The study is devoted to the problem of primary education - the formation of the foundation of a competent personality. All competencies are laid down at the initial stage of training. Since primary school lays the foundation for general learning skills and learning activities, it aims to create the foundation for continuing the education of the individual in secondary school.

Keywords: Educational methods, Foundation of a competent personality, Personality formation, Primary school, Psychological and pedagogical aspects.

1 Introduction

In modern society, a person should have such qualities as learning, thinking creatively, making decisions independently, being proactive, mobile, and creative [3]. The formation of these qualities begins already at the primary level of education.

Primary school is the starting stage of education. It is here that the formation of the foundation of a competent personality takes place [6]. All competencies are laid down at the initial phase of training. Since primary school lays the foundation for general educational skills and learning activities, it aims to create the foundation for the continuation of education by an individual in secondary school. Then and beyond, at the initial stage, the formation of those critical competencies that form the basis of education throughout life is significant.

The rapidly developing changes in society and the economy today require a person to be able to quickly adapt to new conditions, to find optimal solutions to complex issues, showing flexibility and creativity, not to get lost in a situation of uncertainty, to be able to establish effective communication with different people and at the same time remain moral. The main task of a modern school is to reveal the abilities of each student, to educate a personality ready for life in a high-tech, competitive world [16]. The school should prepare a graduate with the necessary set of modern knowledge, skills, and qualities that allow him to feel confident in an independent life.

Traditional reproductive learning, the passive, subordinate role of the student, cannot solve such problems. New pedagogical technologies, effective forms of organizing the educational process, and active teaching methods are required to solve them. Active Teaching Methods (ATM) is considered as a system of techniques that ensure students' activity and various mental and practical activities in mastering the educational material [8].

Active teaching methods are divided into methods of starting a lesson, clarifying goals, expectations, concerns, presenting educational material, organizing independent work, relaxing, and summing up [23]. Each of these methods allows you to effectively solve specific problems of a particular stage of the lesson.

2 Literature Review

Primary education as an object of study, research, and experiment occupies a special place [2]. It is an educational space that belongs to the phenomenon of childhood, an intrinsically valuable period of life, the time of the child's inexhaustible needs for cognition, which, with the assumption of

losses at an early age, turn out to be completely irreplaceable in further education.

The holistic system of modern primary education focused on the continuity, continuity, and integration of preschool and school education, owes its formation, development, and success to the most prosperous theoretical heritage and practical experience of previous generations of theoreticians and practitioners in the field of pedagogy and their contribution to the development of primary education.

Despite the apparent similarity of modern problems in the field of primary education in our country and abroad, each state solves them in its way, relying on its national traditions, scientific potential, economic and human resources, improves the education system, and makes changes to it, corresponding to changes in society.

As practice shows, most teachers mainly use reproductive teaching methods, not using active teaching methods. Such underutilized means include outdoor play, which is necessary for a younger student.

Today, there is no generally accepted definition of active methods. ATM is a modern form of training organization (interactive seminar, training, problem-based learning, training in cooperation, educational games, etc.) in a broad concept. In a narrow concept, ATM refers to individual methods that solve specific problems. Active teaching methods are methods that stimulate the cognitive activity of students. They are mainly based on a dialogue, which presupposes a free exchange of views on resolving a particular problem. A high level of student activity characterizes ATM. The possibilities of various teaching methods in the sense of enhancing educational and educational-production activities are different; they depend on the nature and content of the corresponding method, the methods of their use, the teacher's skill. Each method is made active by the one who uses it [7].

Competence does not confine education to training alone. It connects the lesson and life, is associated with education and extracurricular activities. The basis of competence is independence. A competent person is a formed personality, capable of taking responsibility in various situations, ready to expand the boundaries of their knowledge and improve them.

We live in an era of new technologies, new means of communication that are changing our way of life, communication and thinking, and the methods of achieving prosperity. As a result, the power of the human brain, knowledge, and creativity will increasingly be used as the principal capital of society [1].

One of the urgent problems of modern society is forming a personality that is ready not only to live in changing social and economic conditions but also to actively influence the existing reality, changing it for the better [24]. Therefore, in the foreground are specific requirements for a person – creative, active, socially responsible, well-developed intellect, highly educated, professionally competent.

Today, schools and education around the world face the challenge of defining new approaches to education to enter the "golden age" of research and discovery; rethink the methodology of thinking, learning, work, creativity, and life in general.

The competency-based approach reflects a type of educational content that is not limited to a knowledge-orienting component but presupposes a holistic experience in solving life problems, performing key (i.e., related to many social spheres) functions, social roles, and competencies. Thus, we refused not from knowledge as a cultural subject but from a particular form of knowledge (knowledge "just in case," that is, information).

The modern world is changing at a tremendous speed, and accordingly, the ways of obtaining and understanding knowledge must adjust. The learning process should be dialogical, exploratory, project-based. Pedagogical technologies should meet the following requirements: direct to the development of thinking, teach analysis, help independently acquire knowledge, make choices, engage in polemics, disagree with dogmas, participate in discussions.

Primary school is an organic part, the first stage of secondary school. It is in it that the foundation is laid for the subsequent stages of education. The reform provided for apparent educational goals and objectives for the primary grades: to lay the foundations for the comprehensive development of children, to ensure the formation of strong numeracy skills, literate writing, developed speech, and cultural behavior [22].

These requirements emphasize the importance of developing student's skills for the rational organization of educational work, general academic skills, and abilities, which provide a reliable basis for subsequent educational and cognitive activities of schoolchildren, contributing to the acquisition of deep and lasting knowledge.

As applied to primary school, competence presupposes the following skills: to search - to interrogate the environment, to consult with the teacher, to obtain information; think - establish relationships, be critical of a particular statement, take a position in the statement and develop your point of view; to cooperate - to be able to work in a group, make decisions, settle differences and conflicts, negotiate, fulfill the obligations assumed; get down to business - enter a group or team, contribute, organize your work; to adapt - to use new technologies of information and communication, to resist difficulties, to find new solutions [13].

The most significant competencies of an individual, necessary for continuing education, include communicative competence, information competence, problem-solving competence.

Each of the key competencies has its structure. It can be divided into individual components (aspects), which are expressed in specific activities.

3 Materials and Methods

The methodology for the formation of key competencies includes five stages:

1. Introductory and motivational. Methodological techniques that are impressive enough to attract the involuntary attention of students arouse their positive emotional attitude to the material being studied and the internal need for its knowledge are effective. In addition, students should understand why and what they need to learn about this topic and research the main educational task of the upcoming work.
2. Discovery of new knowledge. At this stage, techniques that require concentration of attention, conduct, independent research, stimulating the growth of cognitive need are of decisive importance.
3. Formalization of knowledge. The primary purpose of the techniques at this stage is to organize students' activities aimed at a comprehensive study of the established mathematical fact and an analytical-systematic search method.
4. Application of the acquired knowledge. Techniques for creating problem situations at this stage should intensify the research activities of students and contribute to the deep assimilation of the educational material.
5. Generalization and systematization. Techniques must establish a connection between the learned facts, bring knowledge into a system, and control students' self-education [15].

It is best to conduct a subject Olympiad to implement value-semantic competence, which includes non-standard tasks

requiring the student to use subject logic, not material from the school course [5].

For each stage of the lesson, its active methods are used to solve specific problems effectively [14]. The choice of method depends on many conditions:

- Learning objectives;
- The level of preparedness of students;
- The age of the students;
- Time allotted for the study of the material;
- School equipment;
- Theoretical and practical preparedness of the teacher [20].

What does a student gain by going through such a learning process? The most important thing is that he has no fear of the unknown. Also, there is a need for communication and independence in solving educational problems; he knows how to prove his own and respects someone else's opinion, develops self-control and experience, and gets vivid emotions and psychological relaxation [17].

4 Results

At first glance, it is pretty challenging to implement general cultural competence in the classroom in primary grades. However, it is possible to use tasks with a remote information part.

Educational and cognitive competence is implemented in a modern school [4]; it has a practical orientation in students' creativity in research activities [7]. After school hours, work is organized to create scientific projects in mathematics. However, one should not forget about the importance of this direction in the child's future life.

Information competence implies the use of various information resources by a child. It is not necessary to use the Internet. You can start with newspaper clippings [20]. Thus, the main competency-based task of the lesson will not be the study of the material found but the formation (or improvement) of the skills of working with information sources. The main thing is to follow the sequence of complicating tasks from lesson to lesson. It is necessary to carry out an approach to the student, taking into account his physical and intellectual capabilities.

Communicative competence is not new in the school system of education because its implementation implies using various collective (communicative) methods of work (such as discussion, group work, pair work, etc.) [12]. These techniques are actively used at different stages of the lesson in primary school.

Social and labor competence can be implemented as follows. First, several lessons are conducted using different options for working in the verbal counting phase. Then the children are offered control work with several types of tasks. As a result, we get feedback with good results.

Thus, children develop the ability to apply skills in various (including non-standard) situations. The competence of personal self-improvement implies the mastery by the student of those methods of activity that will be useful to him in a particular modern life situation [21].

5 Discussion

Students' competencies can be formed at different levels. Three levels are most often distinguished: application, use, and enrichment [6]. They correspond to three levels of general education: primary, basic, and senior. At the initial stage, the student applies the learned modes of activity to specific situations. At the level of the primary school uses the methods of activity in various conditions, transfers the processes to other, previously unknown cases; at the senior level, the learned techniques of activity are enriched by the student and become the basis for the independent training of students [28]. In

elementary school, competencies are formed mainly at the first level, when the student can apply the learned way of acting independently [25].

The most effective way to form key competencies in students is the use of adequate pedagogical technologies by the teacher, within which the student is the subject of his activity [8]. The basic educational technology that supports the competence-based approach is the project method. This method allows creating conditions for the independent search activity of students and solving problems in the least costly way.

At the same time, the student's goal is associated with changing reality, and the teacher's goal is to create situations in which communicative, informational, and problem-solving competencies are formed [16]. This does not mean that the entire learning process should be built only on the basis of project activities. Competencies are also formed when using research methods, methods of practical situations in the lesson, modeling methods, discussion methods, plot games, etc. However, the main emphasis should be on the active involvement of the children themselves.

Let us consider the structure, indicators, and features of each of the three key competencies necessary for a child to continue education, the formation of which must be ensured in primary school: communicative, informational competence, and competence in solving educational problems.

The child's communicative competence begins to form even at the preschool stage of personality development. The child masters speech learns to establish contacts with other people and operate with communication methods to achieve their own goals. In elementary school, this competence is not so much formed anew as developed. The stages of preschool and primary school age are the most significant for the development of communicative competence. Here the task is to form productive communication, both oral and its translation into written form. Its implementation should be based on a clear understanding of the essence and components of the communicative competence of children, knowledge of the features of development in preschool and primary school age [9].

The ideal result of competency-based education is the ability of an individual to resolve life problems independently. Every person faces difficulties in life. Some successfully solve them and grow personally. Others are lost and maladjusted in society. Problem-solving behavior is a consequence of systematic work on defining a problem, analyzing it, actively seeking means and ways to solve it. At the heart of problem-solving behavior, as at the basis of any other competence of a personality, both knowledge, skills, and personal qualities contribute to the vitality of the personality lie [27]. Among unique attributes, the leading place is taken by reflexivity, as the ability to look at oneself from the outside and find a personal resource in oneself to overcome the problem, discover personality characteristics, knowledge and skills or methods of obtaining them that will allow one to overcome a difficulty. In the formation of competence in solving problems, the leading attention should be paid not only to the formation of working methods with a problem but also to the development of reflection as a personality trait necessary for problem-solving behavior.

The formation of students of key competencies in the educational process is called a competency-based approach. What should be guided by the teacher for their implementation? First of all, regardless of the technologies that the teacher uses, he must remember the following rules: the main thing is not the subject that you teach, but the personality that you form. It is not the subject that forms the personality, but the teacher through his activities related to the study of the subject; do not spare either time or effort to foster activity [10]; today's active student is tomorrow's active member of society [19]; help students master the most productive methods of educational and cognitive training, teach them to learn; it is necessary to use the question "why?" more often to teach to think causally [4]; remember that it is not the one who retells who knows, but the one who uses it

in practice; train students to think and act independently; develop creative thinking with a comprehensive analysis of problems; solve cognitive tasks in several ways, practice creative tasks more often; in the learning process, be sure to take into account the individual characteristics of each student, combine students with the same level of knowledge into differentiated subgroups [17]; study and take into account the life experience of students, their interests, developmental features; encourage student research; find an opportunity to familiarize themselves with the technique of experimental work, algorithms for solving problems, processing primary sources, reference materials; teach so that the student understands that knowledge is a vital necessity for him [26]. Explain to students that each person will find his place in life if he learns everything that is necessary for the realization of life plans [13].

6 Conclusion

Primary school teachers help each child to realize their abilities, create conditions for their development, contribute to the preservation and strengthening of health [11]. A positive emotional attitude in the lesson removes fear, creates a situation of success. The optimal pace of the study, the democratic style of communication allows students to concentrate on work, to assimilate the material better. The presentation of the material should be in an accessible form, understandable to the younger student, taking into account his age.

Lessons using active teaching methods are engaging not only for students but also for teachers. But haphazard, ill-considered use of them does not give good results [18]. Therefore, it is very important to actively develop and implement your author's game methods in the lesson according to the individual characteristics of your class.

Thus, the use of active teaching methods allows for the effective organization and consistent implementation of the game educational process in order to achieve high interest and involvement of students in the educational, project, research activities; the formation of personality traits, moral attitudes, values that correspond to the expectations and needs of students, parents, society.

The suggested methods are the tip of the iceberg of pedagogical wisdom, excellence, and the general pedagogical experience of many generations. Remembering them, inheriting them, being guided by them is the condition that can make it easier for the teacher to achieve the most important goal – forming and developing the personality.

Literature:

1. Baumert, J., Nagy, G., & Lehmann, R. (2012). Cumulative advantages and the emergence of social and ethnic inequality: Matthew effects in reading and mathematics development within elementary schools? *Child Development*, 83(4), 1347–1367.
2. Becker, R., & Schoch, J. (2018). *Soziale Selektivität. Empfehlungen des Schweizerischen Wissenschaftsrates SWR [Social selectivity. Recommendations of the Swiss Science Council SSC]*. Bern: Schweizerischer Wissenschaftsrat SWR.
3. Beg, S.A., Lucas, A.M., Halim, W., & Saif, U. (2019). *Beyond the basics: Improving post-primary content delivery through classroom technology*. Tech. rep., National Bureau of Economic Research.
4. Belfi, B., Haelermans, C., & De Fraine, B. (2016). The long-term differential achievement effects of school socioeconomic composition in primary education: A propensity score matching approach. *British Journal of Educational Psychology*, 86, 501–525.
5. Blossfeld, H.-P., Blossfeld, G.J., & Blossfeld, P.N. (2019). Soziale Ungleichheiten und Bildungsentscheidungen im Lebensverlauf: Die Perspektive der Bildungssoziologie [Social inequality and educational decisions over the life course: An educational sociology perspective]. *Journal for Educational Research Online*, 11(1), 16–30.

6. Bohnsack, R. (2010). *Das Gruppendiskussionsverfahren in der Forschungspraxis [The group discussion method in research practice]* (2nd ed.). Opladen: Verlag Barbara Budrich.
7. Brown, A.B., & Clift, J.W. (2010). The unequal effect of adequate yearly progress: Evidence from school visits. *American Educational Research Journal*, 47(4), 774–798.
8. Creswell, J., & Clark, V.L.P. (2018). *Designing and Conducting Mixed Methods Research*. London: CSAGE Publications.
9. Ditton, H. (2016). *Der Beitrag von Schule und Lehrern zur Reproduktion von Bildungsungleichheit [The contribution of school and teaching to reproduction of educational inequalities]*. In R. Becker & W. Lauterbach (Eds.). *Bildung als Privileg*. Wiesbaden: Springer Fachmedien, 281–312.
10. Escueta, M., Quan, V., Joshua Nickow, A., & Oreopoulos, P. (2017). *Education technology: An evidence-based review*. Tech. rep., National Bureau of Economic Research.
11. European Commission/EACEA/Eurydice. (2016). *The structure of the European education systems: Schematic diagrams. Eurydice facts and figures*. Luxembourg City: Publications Office of the European Union.
12. Felouzis, G., & Charmillot, S. (2013). School tracking and educational inequality: A comparison of 12 education systems in Switzerland. *Comparative Education*, 49(2), 181–205.
13. Fend, H. (2008). *Schule gestalten. Systemsteuerung, Schulentwicklung und Unterrichtsqualität [Shaping the school: System control, school development, and teaching quality]*. Wiesbaden: VS Verlag für Sozialwissenschaften.
14. Field, A. (2018). *Discovering statistics using IBM SPSS statistics (5th edition)*. Los Angeles: SAGE Publications.
15. Gomolla, M., & Radtke, F.-O. (2009). *Institutionelle Diskriminierung. Die Herstellung ethnischer Differenz in der Schule [Institutional discrimination: The creation of ethnic differences in the school]* (3rd ed.). Wiesbaden: VS Verlag für Sozialwissenschaften.
16. Harris, A., Chapman, C., Muijs, D., Russ, J., & Stoll, L. (2006). Improving schools in challenging contexts: Exploring the possible. *School Effectiveness and School Improvement*, 17(4), 409–424.
17. Julian, C., Ibarra'an, P., Cueto, S., Santiago, A., & Sever'in, E. (2017). Technology and child development: Evidence from the one laptop per child program. *American Economic Journal: Applied Economics*, 9(3), 295–320.
18. Kyriakides, L., Charalambous, E., Creemers, B.P.M., Antoniou, P., Devine, D., Papastilianou, D., & Fahie, D. (2019). Using the dynamic approach to school improvement to promote quality and equity in education. An European study. *Educational Assessment, Evaluation and Accountability*, 31, 121–149.
19. Lüdtke, O., Robitzsch, A., Trautwein, U., & Köller, O. (2007). Umgang mit fehlenden Werten in der psychologischen Forschung. Probleme und Lösungen [Handling missing values in psychological research: Problems and solutions]. *Psychologische Rundschau*, 58(2), 103–117.
20. Nezhyva, L., Palamar, S., & Lytvyn, O. (2020). *Perspectives on the use of augmented reality within the linguistic and literary field of primary education*. CEUR Workshop Proceedings, 2731, 297–311.
21. Nicolaidou, M., & Ainscow, M. (2005). Understanding failing schools: Perspectives from the inside. *School Effectiveness and School Improvement*, 16(3), 229–248.
22. Palardy, G.J. (2008). Differential school effects among low, middle, and high social class composition schools: A multilevel, multiple group latent growth curve analysis. *School Effectiveness and School Improvement*, 19(1), 21–49.
23. Parhizkar, B., Obeidy, W.K., Chowdhury, S.A., Mohana Gebri, Z., Ngan, M.N.A., & Habibi Lashkari, A. (2012). *Android mobile augmented reality application based on different learning theories for primary school children*. 2012 International Conference on Multimedia Computing and Systems, 404–408. DOI:10.1109/ICMCS.2012.6320114.
24. Peetsma, T.T.D., Van der Veen, I., Koopman, P., & Van Schooten, E. (2006). Class composition influences on pupils' cognitive development. *School Effectiveness and School Improvement*, 17(3), 275–302.
25. Prokhorov, O., Lisovichenko, V., Mazorchuk, M., & Kuzminska, O. (2020). Developing a 3D quest game for career guidance to estimate students' digital competences. CEUR Workshop Proceedings, 2731, 312–327.
26. Rubie-Davis, C.M., Flint, A., & McDonald, L. (2012). Teacher beliefs, teacher characteristics, and school contextual factors: What are the relationships? *British Journal of Educational Psychology*, 82, 270–288.
27. Soloviev, V. (2018). *Augmented reality: Ukrainian present business and future education*. CEUR Workshop Proceedings, 2257, 227–231.
28. Timmermans, A.C., Kuypers, H., & Van der Werf, G. (2015). Accurate, inaccurate, or biased teacher expectations: Do Dutch teachers differ in their expectations at the end of primary education? *British Journal of Educational Psychology*, 85, 459–478.

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