

NATIONAL CURRICULUM AND CREATIVITY DEVELOPMENT: PERSPECTIVES OF TEACHERS IN MOLDOVA

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In today's world, characterized by rapid change and uncertainty, creativity is becoming a key skill for successful adaptation and innovation. This paper discusses whether the school curriculum should promote creativity and creative thinking. Curricula have the potential to develop creative thinking in students. However, to achieve this goal, it is necessary to consider the content and teaching methods, ensuring a balance between standardization and creative freedom to ensure the development of both basic knowledge and students' creativity. It presents the results of a study of teachers' opinions in the Republic of Moldova regarding the role of curricula and teaching materials in various disciplines in developing and shaping students' creativity and creative thinking.

Keywords: *creativity, creative thinking, school, students, educational programs, curricula.*

CURRICULUM NAȚIONAL ȘI DEZVOLTAREA CREATIVITĂȚII: PERSPECTIVE ALÉ PROFESORILOR DIN MOLDOVA

În lumea de astăzi, caracterizată de schimbări rapide și incertitudine, creativitatea devine o abilitate cheie pentru adaptarea și inovarea de succes. Această lucrare ne-am propus să examinăm dacă programa școlară ar trebui să promoveze creativitatea și gândirea creativă. În curriculum se de a dezvolta gândirea creativă la elevi. Cu toate acestea, pentru atingerea acestui scop, este necesar să se ia în considerare conținutul și metodele de predare, asigurând un echilibru între standardizare și libertatea creativă pentru a asigura dezvoltarea atât a cunoștințelor de bază, cât și a creativității elevilor. În articol sunt prezintate rezultatele unui studiu al opiniilor profesorilor din Republica Moldova cu privire la rolul curriculumului și materialelor didactice din diverse discipline în dezvoltarea și modelarea creativității și gândirii creative a elevilor.

Cuvinte-cheie: *creativitate, gândire creativă, școală, elevi, programe educaționale, curricula.*

Introduction

It is well known that the 21st century is characterised by rapid development, rapid changes, high pace of life, which requires from the individual the same rapid and adequate reactions, flexibility in the perception of problem situations, productivity and efficiency in solving life tasks. In this context, it becomes a priority to enrich science with theoretical and empirical data, as well as to develop methods and mechanisms for the development of active imagination and creative thinking, initiative and creative abilities of the individual.

The question of whether the school curriculum should contribute to the development of creativity and creative thinking is the subject of active discussions in scientific literature. Many researchers and educators agree that the integration of creativity development into the educational process is necessary to prepare students for modern challenges.

Creativity (from Latin *creatio* - creation) is a person's ability to generate new, original ideas that differ from traditional approaches [7]. Creative thinking, in turn, is a process in which an individual uses imagination and non-standard approaches to solve problems or create something new.

The main objectives of the curriculum include: ensuring systematic assimilation of knowledge, skills and abilities; ensuring continuity in learning, moving from simple to complex; taking into account modern achievements of science, technology and culture and developing students' creative abilities.

Note that the educational process today is aimed not only at the transfer of knowledge, but also at the development of thinking skills, which are considered key learning objectives. Integrating creative thinking across disciplines allows students to master more complex cognitive operations. By combining logic and

imagination and analysing the most effective ways to solve problems, students learn to choose and apply different thinking strategies depending on the context.

Conceptual base

The curriculum can and should be a tool to stimulate imagination, flexibility of thought and creative expression. Including tasks that require students to generate multiple ideas, apply a variety of problem-solving strategies and not be afraid to make mistakes helps to develop these skills. For example, the Australian education programme [10] emphasises the importance of critical and creative thinking by encouraging students to generate and evaluate knowledge, consider alternatives and solve problems.

The extent to which it is justifiable to task curricula with developing creative thinking is a matter of academic debate. Among the proponents of such an approach, first of all, let us name E.P. Torrance [8]. The American psychologist known for his research in the field of creativity emphasised the importance of creating learning situations characterised by incompleteness or openness to the integration of new elements. He believed that such conditions encourage students to formulate multiple questions and develop creative thinking.

In her paper ‘Development of Creative Thinking in Foreign Language Lessons at Primary School’, Kocapeba describes the benefits of developing creative thinking skills in younger pupils [9]. She considers the factors that contribute to laying the foundations of creativity in the classroom and offers recommendations for the development of creative thinking in younger students with examples of their practical application.

Proponents of integrating creativity into the learning process provide many arguments in favour of integrating creativity into curricula:

The need to prepare for the future: Many researchers emphasise that in today’s world of rapid change and uncertainty, creativity is becoming a key skill for successful adaptation and innovation. Curricula should purposefully develop creative thinking rather than relying on random opportunities in extracurricular activities. The authors of the *Conceptul Dezvoltării Curriculumului Școlar* argue that the development of a system of competences, including creative ones, is necessary for pupils to fulfil their potential, for lifelong learning, for well-being, for shaping the future and for transforming society [12].

Developing cognitive skills: Incorporating assignments that require students to apply a variety of problem-solving strategies, integrating creative tasks and projects into the curriculum promotes flexible thinking, the ability to generate ideas and find out-of-the-box solutions [2]. It also helps students to see connections between different areas of knowledge. And the use of discussions in lessons promotes critical thinking and the ability to argue their point of view.

Creating Motivation and Engagement: Creative assignments and projects that involve active participation and self-expression increase students’ motivation to learn and engagement in the learning process [6].

Nurturing emotional intelligence: Developing creativity is closely linked to developing emotional intelligence, as it requires the ability to express one’s feelings and emotions, understand the feelings of others, and interact creatively [5].

Developing teamwork skills: Group projects and collaborative creative assignments foster the development of effective teamwork skills [3]. Such projects not only deepen students’ understanding of academic material, but also foster communication and co-operation skills and develop the collaborative competencies necessary for professional and personal success.

Building confidence and independence: a curriculum that fosters creativity also builds personal qualities such as self-confidence, independence, determination and perseverance. Providing opportunities for students to express themselves creatively and solve unconventional problems helps them to develop confidence and the ability to assert themselves. These works emphasise the importance of integrating creative methods into the learning process to develop creative thinking and abilities in students.

However, there are also opposing views. Some researchers believe that excessive standardisation of curricula may limit creative expression and that creativity is better developed in less formal settings, such as extracurricular activities or independent projects. In addition, overloaded programmes may leave insufficient time for creative activities.

Researchers critical of excessive standardisation of curricula point to its potential negative impact on students' creative development. Arguments against overloading curricula with creativity development:

Limited time and resources: Some researchers believe that curricula are already overloaded with compulsory material, and adding additional tasks aimed at developing creativity may have a negative impact on the acquisition of basic knowledge [1].

Risk of formalising creativity: There is a concern that attempts to formalise and structure the development of creativity may lead to its suppression and loss of spontaneity. In his work, Hiam stresses that excessive standardisation and a focus on specific outcomes can limit creative thinking [4]. He notes that fear of mistakes and perfectionism, often cultivated in standardised education systems, are barriers to the development of creativity. Higham suggests focusing on the creative process itself, not just the end results, to overcome these limitations.

In addition, excessive standardisation can lead to limiting the diversity of educational programmes and teaching methods. This, in turn, can stifle the development of students' creativity, as standardised programmes often focus on learning a fixed set of knowledge and skills, leaving little room for innovation and creative thinking.

The need to create a special environment: Some educators argue that creativity is better developed in a free and supportive environment that can be created outside of school hours (in circles, studios, workshops, etc.) [1].

Although extracurricular activities such as clubs and sections play an important role in the development of creativity, limiting the development of creative thinking to them alone may not be sufficient. These studies highlight the need for a balance between standardisation and flexibility in educational programmes to ensure the development of both basic knowledge and creativity of students.

The concept of national curriculum development in the Republic of Moldova takes into account the Council of Europe recommendations [11] on key competences for lifelong learning, as well as the curriculum development objectives formulated in the Development Strategy 'Education 2030'. Skills such as critical thinking, problem solving, teamwork, communication and negotiation skills, analytical skills, creativity and intercultural skills are an integral part of key competences.

Within the framework of the project „*Theory and Methodology of Continuous and Cyclical Monitoring and Development of School Curriculum*”, we conducted a study on the opinion of teachers from the Republic of Moldova regarding the role of curricula and teaching materials in different disciplines in the development and formation of students' creativity and creative thinking.

Research methodology.

We have developed a questionnaire that includes questions regarding the extent to which the curriculum contributes to increasing the level of imagination, flexibility, ability for creative self-expression and, in general, the level of creative interaction in students. Some of the questions were aimed at studying the extent to which the content of the curriculum stimulates in students: development of the ability to produce a large number of ideas; the ability to apply various strategies in solving problems, to use various methods of completing tasks without fear of making mistakes; the ability to produce new non-standard ideas and develop them; the formation of a personal emotionally positive attitude towards the development of creativity as a necessary skill of a “high order”, as well as the extent to which the curriculum and its content contribute to the actualization of such personal qualities as self-confidence, independence, determination, persistence in achieving a goal, the ability to defend one's opinion, the ability to take risks, and team creative work skills.

Description of the sample.

87 teachers from different schools and lyceums took part in our study. According to the work experience, the participants were distributed as follows: 14 respondents with up to 5 years of work experience, 20 - from 6 to 15 years, 14 - from 15 to 25 years and 39 teachers with more than 25 years of work experience. Graphically, the results are presented in Figure 1.

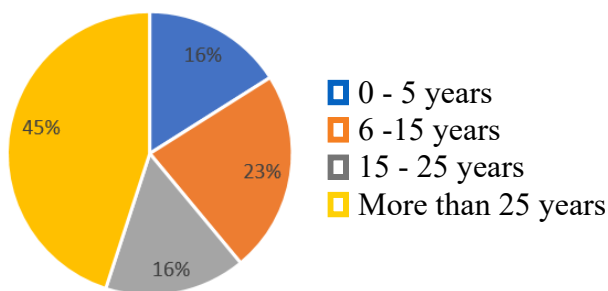


Figure 1. Length of service in the education system

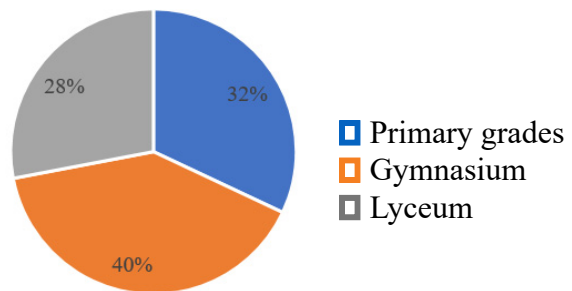


Figure 2. Stage of education

Teachers of all three levels of school education took part in the survey: 28 teachers of primary grades, 35 teachers of gymnasium grades (from 5 to 9) and 24 teachers of lyceum grades (see Figure 2).

It should be noted that teachers of all disciplines of humanitarian and real profile took part in the survey.

Analysis of the research results.

Let us further consider the answers received to the questions of the questionnaire.

Question 1: To what extent do you think that the curriculum of the subject you teach contributes to increasing the level of imagination, flexibility, ability for creative expression and, in general, the level of creative interaction in students?

Figure 3 presents the results obtained, which show that 81 teachers believe that the existing curriculum in our education system in various subjects contributes to a great extent (42 teachers) or sufficiently (39 teachers) to increasing the level of imagination, flexibility, ability for creative expression and, in general, the level of creative interaction in students.

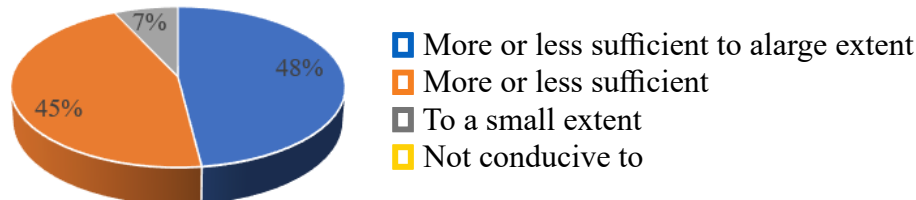


Figure 3. Extent to which the curriculum influences the development of imagination, flexibility, self-expression and creative interaction

Question 2: To what extent does the content of the curriculum encourage students to develop the ability to produce a large number of ideas?

The majority of teachers (68 persons) answered that school programmes stimulate the development of the ability to produce a large number of ideas to a great (45 - 52%) and sufficient (23 - 26%) extent. However, 15 teachers (17%) believe that it does not stimulate enough, and 4 teachers (5%) expressed the opinion that it does not stimulate at all.

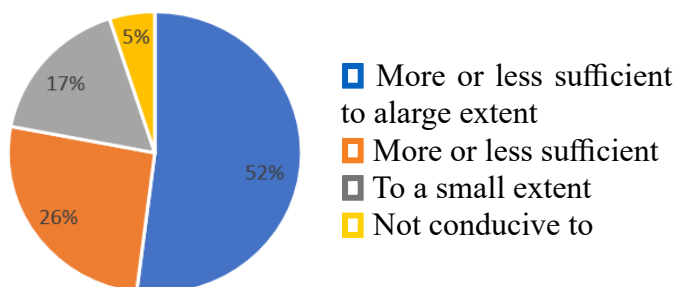


Figure 4. Degree of influence of the curriculum on the development of the ability to produce a large number of ideas

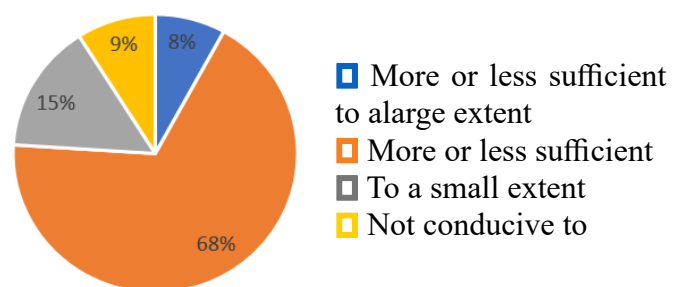


Figure 5. Degree of influence of the curriculum on the development of the ability to produce new ideas

Figure 5 shows the answers to **question 3**: To what extent does the content of the curriculum contribute to the development of the ability to produce new non-standard ideas, to develop them?

As we can see, the majority of teachers (59-68%) believe that the curriculum content sufficiently contributes to the formation of the ability to produce new non-standard ideas and develop them. At the same time, only 7 teachers (8%) expressed the opinion that it stimulates this skill to a high degree, and 21 teachers noted that it stimulates it to a low degree (13 - 15%) or does not stimulate it at all (8 - 9%).

Generating a large number of ideas (fluency) is one of the main components of creativity. Curricula should offer tasks that stimulate this process (e.g. brainstorming, mind maps). It is important to create an environment in which students are not afraid to express their ideas, even if they seem unusual or unrealistic. But it is necessary to consider not only the quantity but also the quality of ideas. Originality and the ability to generate unconventional ideas are key components of creativity. To develop this ability, it is important to support and stimulate students' curiosity and research interest. Curricula should offer tasks that require learners to think outside the conventional framework, to find new connections and create original solutions, and should pay attention to the development of critical thinking and the ability to evaluate and select the most promising ideas.

Question 4: To what extent does the content of the curriculum encourage students to use a variety of strategies to solve problems, to use different ways of doing things without fear of making mistakes or getting the wrong answer?

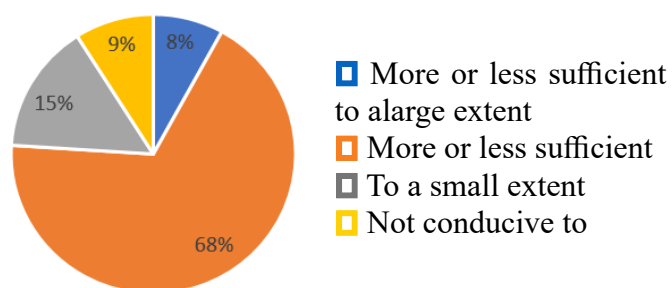


Figure 6. Degree of influence of the curriculum on the development of the ability to apply a variety of strategies in problem solving

In response to question 4, the majority of teachers expressed the opinion that the content of the curriculum encourages students to use a variety of strategies in problem solving to a great (21 - 24%) and sufficient (55 - 65%) extent. However, 11 educators (13%) felt that this was not enough.

Flexibility of thinking and the ability to apply a variety of strategies are important components of creativity. Curricula should offer tasks that require students to experiment, look for different approaches and not be afraid of making mistakes. In our view, what is most important in this context is

the teacher's ability to create an atmosphere in which mistakes are perceived as opportunities for learning and growth.

In the process of correcting mistakes, children learn to find creative solutions and look for non-standard ways. This makes them more ready for change and helps them better cope with the uncertainties and challenges that life's journey inevitably brings. Mistakes also help develop empathy and understanding of others. When a person recognises their own weaknesses and vulnerabilities, they become more tolerant of the mistakes of others. This helps to improve relationships and create a more supportive and constructive environment where everyone can learn and grow without fear of judgement.

Mistakes also play an important role in building self-confidence. Each time students overcome failure and find ways to improve, they build confidence in their abilities. This helps them become more confident in their abilities and ready for new challenges and opportunities. By acknowledging and accepting our mistakes, we create space for growth and fulfilment. Thus, learning to see mistakes as opportunities for growth and development is not only a useful skill, but also an important part of our life journey.

Developing a positive attitude towards creativity is an important factor in motivation and readiness to be creative. Teachers' views on this were expressed in response to **question 5**: To what extent does the content of the curriculum contribute to the formation of a personal emotionally positive attitude towards the development of creativity as a necessary "high order" skill)? The results are displayed in figure 7.

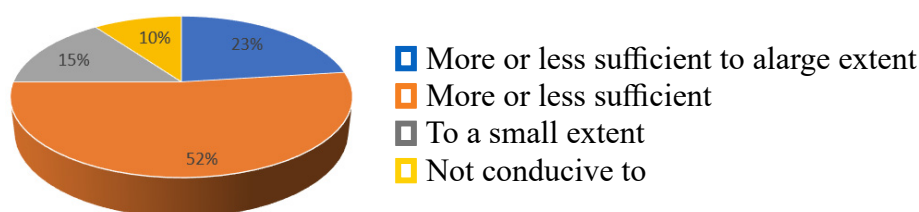


Figure 7. Degree of influence of the curriculum on the formation of positive attitudes towards creativity

Among the educators who participated in the study, 20 people (23%) believed that the curricula were highly and 45 people (52%) believed that the curricula were sufficiently stimulating in the formation of positive attitudes towards creativity. However, 22 people expressed the opinion that the curricula do not sufficiently (13 - 15%) or not at all (9 - 19%) include tasks that allow students to feel the joy of creativity.

The final question in this part of the questionnaire sought to investigate the extent to which the curricula promote and reinforce important personal qualities. **Question 6** reads as follows: To what extent does the content of the curriculum contribute to the actualisation of personal qualities such as self-confidence, independence, determination, perseverance in achieving goals, ability to defend one's opinion, ability to take risks, creative teamwork skills? Teachers' opinion was distributed as follows: it promotes to a high degree - 28 (32%), sufficiently - 52 (60%), and 9 teachers (10%) believe that it does not sufficiently promote confidence, independence, determination and other important personal qualities. The results are clearly presented in Figure 8.

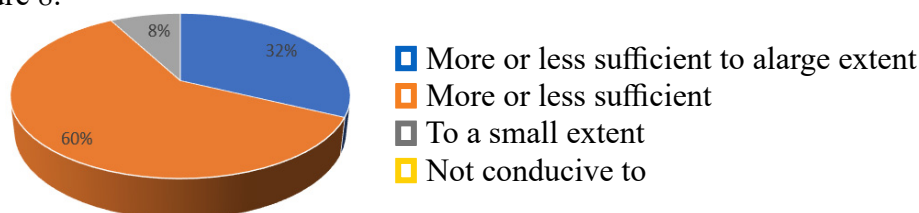


Figure 8. Degree of influence of the curriculum on the actualisation of personal qualities

In our opinion, such personal qualities as self-confidence, independence, determination, perseverance in achieving the goal, ability to defend one's opinion, ability to take risks, teamwork skills are important conditions not only for successful creative activity, but also for harmonious life in any conditions. And the above-mentioned qualities allow to cope with the challenges of the time, to create conditions for sustainable growth and prosperity in the future. Curricula should offer tasks that require students to take initiative, assume responsibility, defend their ideas and work in teams.

Analysing trends in the development of new ideas.

On average, 25% of teachers believe that modern school programmes stimulate the development of creativity and creative thinking in pupils to a greater extent. Among the statements of teachers we should note the following: *“In each class there are tasks for creativity and creative thinking”*; *“In each subject the curriculum is designed for a multi-level approach to learning, contains a sufficient number of tasks for the development of creativity”*; *“Fully meets the requirements, time, period and age of pupils”*; *“The programmes have a sufficient number of tasks in which pupils are given the opportunity to express themselves, their abilities to think creatively and critically, to propose ideas”*; *“The curriculum is practically already more focused on the development of creativity and creative thinking in pupils”*; *“The curriculum is more focused on the development of creativity and creative thinking in pupils”*.

Those who believe that this happens, even if sufficiently, but still not to a high degree (50% on average) expressed the opinion that the effectiveness of curricula in terms of stimulating creativity may vary depending on the subject and teaching approaches: *“In primary school, abilities are only formed, at an older age they become apparent”*; *“Curricula, especially in the language and humanities cycle, contain ele-*

ments that can stimulate creative thinking. For example, they offer tasks for writing essays, compositions”; “Mathematics develops not so much creativity as logic and spatial thinking”; “Mathematics is not liked by everyone and mostly causes anxiety in children”; “Some topics (in different subjects) are difficult to learn and there is little time for creativity”; “The flow of information from outside requires a certain flexibility, creativity and quick thinking, which go beyond the content of the curriculum”.

On average, 15-17% of teachers believe that the curriculum (does not sufficiently stimulate the development of creativity and creative thinking, and 8-10% believe that it does not contribute at all. Among the comments of these teachers, we note the following: “Just not the 2019 curriculum”; “The development of creativity occurs in theory: curricula (for example, in English) offer assignments for writing essays, compositions and dialogues that require students not only knowledge, but also an original approach to expressing thoughts. However, in reality, these assignments often have strict frameworks and assessment standards. For example, requirements for a certain structure of essays or limited time, which can restrain free expression”; “It does not really contribute, since it is inflexible, not variable, but fixed”; “The curriculum ensures a creative approach and interest, but still does not satisfy the desire and motivation of students for something new and original”; “It would be good if the textbooks had more pictures, examples of exercises from which the student could choose in accordance with their interests, to compose sentences, dialogues, essays, short texts”; “Perhaps in some topics of the curriculum it would be possible to set additional tasks that would contribute to the development of creativity, but for the most part this aspect of creativity is not really targeted”; “The curriculum can contribute to the development of creativity and creative thinking in students if it includes tasks that require non-standard solutions, teamwork and self-expression, and also provides freedom of choice in educational activities. However, excessive focus on template tests and strict frameworks can limit the development of these skills”; as well as the following opinion: “There are no such tasks in the senior grades”.

- Thus, we will highlight the limitations of developing and stimulating creativity and creative thinking in educational programs:

- **emphasis on memorization**: in many systems, the curriculum prefers memorization and reproduction of information to original thinking;

- **lack of flexibility**: a rigid structure and a large number of subjects require standardization, not creative search;

- **standardized assessments**: tests and exams emphasize the only correct answers, limiting the opportunity to search for new ideas or multiple solutions;

- **lack of time**: sometimes the curriculum is so overloaded that it leaves no room for extracurricular activities or alternative teaching methods;

- **complexity of the program**: not everything is learned, not everyone has time, there are very complex topics that could be excluded or more time could be allocated in the curriculum.

Separately, we note that many teachers do not relieve themselves of responsibility for the implementation of educational programs, for their adaptation to the class and the needs of students, for the actualization of creative abilities. Examples include the following: “Often it depends on the teacher’s attitude”; “A lot depends on us too. Old methods don’t work, we can introduce new ones”; “It also depends on the teacher to what extent he or she can use various methods, techniques and techniques to develop a child’s creativity and out-of-the-box thinking”; “It develops thanks to interesting lessons, where there is not only a blackboard and chalk, but creative cooperation between the teacher and the children”.

Everyone agreed that the curriculum should create conditions for the active development of creativity and creative thinking. This is achieved through:

- **problem-based learning**: tasks that involve finding different solutions to the same problem stimulate flexible thinking;

- **integration of art and humanities**: the inclusion of literature, music, painting, theatre and other arts helps students visualize and imagine different scenarios, ideas and emotions;

- **integration of technology**: digital programs and interactive applications can stimulate students’ imagination;

- **use of gaming technologies and simulations:** educational games, role-plays and simulations allow students to immerse themselves in different situations and find creative solutions;
 - **variety of tasks and projects** (subject flexibility): offering tasks that require different strategies, approaches and perspectives; allowing students to choose their research topics and methods of work, as well as express themselves through different creative forms (writing, drawing, music, drama).
 - **personalized learning:** adapting tasks and projects to the interests and needs of each student.
 - **collaborative learning:** using teaching methods that encourage interaction and knowledge sharing between students (e.g. pair work, group discussions). This also includes team projects: tasks that require collaboration, exchange of ideas and mutual assistance.
 - **support and recognition:** creating an atmosphere in which students feel confident and safe to express their ideas and emotions.
 - **the role of the teacher as a facilitator:** the teacher should act as a mentor and mediator, helping students to establish contact with each other and find common solutions.
- Thus, a curriculum aimed at developing creativity should be:
- **Integrated:** creative tasks and projects should be linked to other subjects and areas of knowledge.
 - **Flexible:** the curriculum should provide teachers and students with the opportunity to adapt tasks and work methods to their needs and interests.
 - **Supportive:** it is important to create an atmosphere in which students feel safe and confident to express their ideas and emotions.
 - **Evaluative:** the assessment of creativity should take into account not only the results, but also the process, progress and individual achievements of each student.

Conclusions

Creativity and creative thinking are key aspects of modern education aimed at preparing students to solve non-standard problems and adapt to a rapidly changing world. The curriculum should have a significant impact on the development of creativity and imagination, self-expression and creative interaction in students, and should actively contribute to the development of related personal qualities.

The curricula existing in the Republic of Moldova have the potential to develop creative thinking in students. However, to achieve this goal, it is necessary to carefully consider the content and teaching methods, ensuring a balance between standardization and freedom of creativity. It is important to create conditions in which students can show initiative, experiment and not be afraid of mistakes, which is the foundation for the development of creativity, offering a variety of tasks, methods and projects, as well as supporting and encouraging students' creative expressions. The successful implementation of such a program requires flexibility, adaptability and cooperation between teachers, students and parents.

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