

<https://doi.org/10.62837/2025.7.175>

İMANOVA KƏMALƏ XALİD QIZI

Baş müəllim

Xarici dillər kafedrası

Azərbaycan Tibb Universiteti, Mərdanov qardaşları 58

İmanova.kamala@outlook.com

CREATIVITY AND ITS ROLE IN EDUCATION. SUMMARY

Creativity is the act of transforming imagination into reality, combining originality with usefulness. It is not limited to the arts but is present in science, education, business, and daily life. Scholars describe creativity through models like the “Four Cs” and the “Four Ps,” which emphasize its interaction between ideas, people, outcomes, and environments.

In education, creativity is essential for developing problem-solving, critical thinking, and adaptability. It allows students to discover their talents, build confidence, and express individuality. Research shows that creative learning improves academic performance, supports mental health, and develops essential life skills. Creativity also makes learning more meaningful by turning passive knowledge into active exploration.

Yet traditional education often suppresses creativity by focusing on memorization, conformity, and standardized testing. Studies reveal that while children start with high creative potential, rigid schooling drastically reduces it. Fear of mistakes, strict curricula, and lack of autonomy discourage experimentation and originality. Creativity, however, is not lost forever and can be reawakened through practice and supportive teaching methods.

Teachers play a vital role in nurturing creativity through innovative methods such as Six Thinking Hats, Mantle of the Expert, and Imaginative Education. They inspire curiosity, encourage risk-taking, and create supportive environments for exploration. By modeling creativity themselves, teachers demonstrate adaptability and openness to new approaches. Ultimately, teachers shape not only knowledge but also the mindset students need for the future.

Key words: creativity, education, teacher, imagination, models.

What is creativity?

Creativity is one of the most fascinating and yet most difficult concepts to define. At its core, creativity can be described as the act of transforming imagination into reality. It is the ability to perceive the world in new ways, to make connections between ideas that seem unrelated, to identify hidden patterns, and ultimately to

generate solutions that are both original and useful. Unlike pure imagination, which exists only in thought, creativity requires action; ideas must be put into practice to become truly creative.

Although many people associate creativity primarily with the arts, it is not confined to painters, writers, or musicians. Creativity exists in every domain of life and work—education, science, business, and even everyday problem-solving. For example, a scientist who develops a new method of drug discovery, a teacher who designs a novel approach to explaining a complex topic, or even an individual who finds a new way to organize daily tasks are all demonstrating creativity. Importantly, creativity is not an inborn talent that only a few possess; it is a mindset and a process that can be cultivated with practice, curiosity, and the right environment.

Researchers often emphasize that creativity has two fundamental components. The first is originality—a creative idea must be new, different, and not simply a copy or slight variation of what already exists. The second is functionality—an idea must have some value, usefulness, or practical application. When these two elements combine, creativity moves beyond novelty and becomes meaningful.

Over the years, scholars have developed several frameworks to better understand the different forms of creativity. One of the most influential is the “Four C” model, which categorizes creativity into four levels. Mini-c creativity refers to personal insights and small discoveries that may be meaningful only to the individual, such as a child’s new understanding of a concept. Little-c creativity represents everyday creativity, the type people use to adapt to changes and solve routine problems. Pro-C creativity is seen in professionals who are skilled and innovative in their work but may not be widely recognized outside their field. Finally, Big-C creativity refers to groundbreaking achievements that transform entire disciplines or societies, such as technological innovations, scientific breakthroughs, or artistic masterpieces.

Another well-known perspective comes from Mel Rhodes, who in the 1960s proposed the “Four Ps” of creativity: Process, Product, Person, and Press. The process dimension explores the mental mechanisms that occur during creative thinking, while the product dimension focuses on the tangible or intangible outcomes of creativity. The person perspective looks at the characteristics of creative individuals, such as curiosity, openness, resilience, and intrinsic motivation. Finally, press (or place) refers to the environment in which creativity occurs, highlighting the importance of supportive conditions that encourage exploration and reduce fear of failure. Together, these four dimensions provide a holistic view of creativity as an interaction between individual, process, product, and context.

Why Creativity Matters in Education and for Students: Creativity as a Tool for Deeper Learning

Education has long been regarded as the cornerstone of personal and societal development. In today's rapidly changing world, however, the role of education cannot be confined to the transmission of facts and figures. Beyond literacy and numeracy, one of the most vital outcomes of education is the cultivation of creativity. Creativity not only empowers students to discover and express their unique talents but also equips them with the problem-solving and critical thinking skills necessary to thrive in the 21st century.

Every learner possesses talents that may remain dormant if not nurtured. Creative education acts as a shiner, polishing these hidden abilities and giving learners the opportunity to approach tasks in unique and efficient ways. As one saying goes, "What is visible is not how hard you worked, but how differently and effectively you performed the task." Creativity directly contributes to efficiency while often reducing time and effort. Bill Gates once remarked, "For any difficult task, I will choose a lazy person because a lazy person will find an easier way to perform the task." This insight reflects how introspection and creative thinking often produce smarter, more efficient outcomes.

Creativity is often mistakenly equated only with artistic expression, but it is much broader in scope. It is present in mathematics, science, entrepreneurship, cooking, and even in daily decision-making. Designing a spreadsheet formula, reimagining a recipe, or planning a birthday party all require creativity. At its core, creativity embodies curiosity, inventiveness, and the drive to explore the unknown. These qualities push boundaries, enable innovation, and generate solutions to pressing social challenges.

The Role of Creativity in Education

Despite its importance, creativity is often undervalued in traditional education systems. Conventional models emphasize memorization, conformity, and standardized testing, which may produce technically proficient students but fail to cultivate innovators. Yet in a world increasingly shaped by automation and artificial intelligence, creative thinking is a critical skill. By integrating creativity into the curriculum, education can prepare learners to adapt, problem-solve, and succeed in unpredictable futures.

At its heart, creativity is problem-solving. It is closely linked to critical thinking, which enables students to analyze situations, make connections, and explore multiple perspectives. For example, students at Prisma engage in Collaborative Problem-Solving workshops that simulate real-world challenges, such as deciding which businesses to invest in or determining how to power a city with limited resources. These exercises develop both creative and critical capacities, teaching learners to think flexibly and collaboratively.

Creativity also contributes to the development of emotional intelligence. When students engage in creative projects, they experience pride, accomplishment, and enhanced self-esteem. For instance, Prisma students present interdisciplinary projects every six weeks, which not only strengthens confidence but also builds resilience and grit. Unlike passive learning, creative tasks require learners to brainstorm, iterate, and embrace failure as part of growth. In this way, creativity fosters perseverance, risk-taking, and adaptability—qualities essential for lifelong learning.

Moreover, creative collaboration cultivates communication and teamwork skills. In a globalized workforce where cooperation is key, the ability to co-create, negotiate, and innovate within teams is invaluable.

1. Improved Problem-Solving Skills – Students trained to think creatively learn to approach challenges from multiple perspectives, producing innovative solutions.

2. Critical Thinking Development – Creative tasks demand evaluation, comparison, and synthesis, deepening analytical capabilities.

3. Future Readiness – With job markets in constant flux, creativity equips students to face uncertainty and adapt to evolving demands.

4. Self-Expression and Identity – Creative education fosters individuality, helping students discover their voices and perspectives while boosting self-esteem.

Traditional education often relies on passive absorption of knowledge, but creativity transforms this dynamic. Students become active participants, experimenting, questioning, and creating. Creative pedagogy also encourages interdisciplinary connections—bridging math with art, history with performance, or science with storytelling. Such methods mirror real-world complexity, where problems are rarely confined to a single domain.

Scientific Evidence Supporting Creativity in Education:

- Improved Academic Performance – Harvard's Project Zero found that students exposed to arts-based education performed 16% better in math and science.

- Enhanced Mental Health – A 2018 report by the American Institutes for Research showed that participation in creative activities reduces stress and improves resilience.

- Development of Essential Life Skills – According to a 2019 OECD report, students engaged in creative learning develop adaptability, leadership, and collaboration skills crucial for the modern workforce.

The World Economic Forum (2019) further placed creativity among the top three skills necessary for success in the job market, underlining its centrality for the future.

At its essence, creativity is about transforming learning into a meaningful, participatory, and memorable process. Whether through storytelling in science, role-playing in history, or pattern design in mathematics, creativity enables students to engage with subjects deeply and holistically. By making knowledge experiential and

enjoyable, creativity ensures that learning is not merely the accumulation of information but the development of wisdom and capability.

Traditional Education Suppresses Creativity

Creativity is a natural human trait, yet traditional education systems often unintentionally suppress it. With their focus on memorization, conformity, and standardized testing, schools reward correct answers over original thinking. As a result, many students lose the confidence to take risks or explore unconventional ideas.

Research highlights how early this decline begins. A study by George Land and Beth Jarman showed that while 98% of five-year-olds demonstrated high levels of divergent thinking, by adulthood this number had fallen to just 2%. This illustrates how rigid educational structures narrow the imagination instead of nurturing it.

Several factors contribute to this suppression. Rigid curricula give students little autonomy to pursue their interests or passions, while grouping by age and subject limits exposure to diverse perspectives. Standardized grading systems further reinforce the fear of mistakes, discouraging experimentation—an essential part of the creative process. Without constructive feedback or recognition, students learn to prioritize safe answers over innovation.

Despite this, creativity is not lost forever. It can be reawakened through intentional practice and techniques that encourage risk-taking and imaginative expression. Exercises such as upside-down or blind drawing help bypass rigid habits of thought, reminding us that creativity is a skill that can be trained.

To meet the challenges of the modern world, education must evolve. Rather than suppressing imagination, it should embrace creativity as a core competency—encouraging exploration, valuing mistakes, and cultivating the confidence to think differently. Only then can students realize their full creative potential.

The Role of Teachers in Nurturing Creativity

In the modern educational landscape, teachers are no longer just transmitters of knowledge but facilitators, mentors, and creative guides. Their role is to shape not only what students learn, but how they think, explore, and create. Nurturing creativity is vital, as it is now recognized as a critical skill for innovation, adaptability, and problem-solving in the 21st century.

Creative pedagogy requires teachers to approach teaching in inventive ways—considering alternatives, adopting flexible strategies, and designing lessons that inspire curiosity, experimentation, and risk-taking. Since this process is dynamic, educators must remain lifelong learners, embracing professional development and adapting new practices.

Several models illustrate how creativity can be fostered. Edward de Bono's Six Thinking Hats encourages students to view problems from multiple perspectives—facts, feelings, caution, optimism, creativity, and process—helping discussions move beyond confrontation and making space for all voices. Dorothy Heathcote's Mantle

of the Expert places students in fictional professional roles, linking classroom learning with real-world scenarios and fostering responsibility and problem-solving. Kieran Egan's *Imaginative Education*, inspired by Vygotsky, uses "cognitive tools" aligned with developmental stages—from sensory responses and stories to theories and reflexivity—ensuring imagination is central at every stage of learning.

Beyond methods, teachers themselves play an irreplaceable role. By creating classrooms that celebrate curiosity and welcome mistakes, they help students overcome the fear of failure. Thought-provoking questions, diverse perspectives, and open-ended exploration further stimulate originality. Teachers also model creativity by experimenting with lessons, showing flexibility, and demonstrating that creativity is a mindset, not just an occasional activity.

Equally important is recognizing individual learning styles. When educators adapt their teaching and encourage collaboration, all students gain opportunities to contribute creatively. Group projects expose learners to different perspectives and highlight the power of collective problem-solving.

The role of teachers in nurturing creativity is therefore indispensable. By fostering imagination, risk-taking, and problem-solving, they empower students to unlock potential and step confidently into the future as innovators and visionaries. In doing so, teachers shape not only young minds but also the future of society.

Иманова Кямаля Халид кызы

КРЕАТИВНОСТЬ И ЕГО РОЛЬ В ОБРАЗОВАНИИ. РЕЗЮМЕ

Креативность — это акт превращения воображения в реальность, сочетающий оригинальность с полезностью. Она не ограничивается искусством, но присутствует в науке, образовании, бизнесе и повседневной жизни. Учёные описывают креативность через модели «Четырёх С» и «Четырёх Р», которые подчеркивают её взаимодействие между идеями, людьми, результатами и средой.

В образовании креативность необходима для развития навыков решения проблем, критического мышления и адаптивности. Она позволяет студентам открывать свои таланты, укреплять уверенность в себе и выражать индивидуальность. Исследования показывают, что креативное обучение улучшает академическую успеваемость, поддерживает психическое здоровье и развивает важные жизненные навыки. Креативность также делает обучение более значимым, превращая пассивное знание в активное исследование.

Тем не менее, традиционное образование часто подавляет креативность, сосредоточиваясь на запоминании, конформизме и стандартизированном тестировании. Исследования показывают, что хотя дети начинают с высоким

творческим потенциалом, жёсткая система обучения резко его снижает. Страх ошибок, строгие учебные планы и отсутствие автономии препятствуют экспериментам и оригинальности. Однако креативность не теряется навсегда и может быть пробуждена с помощью практики и поддерживающих методов обучения.

Учителя играют ключевую роль в развитии креативности, используя инновационные методы, такие как «Шесть шляп мышления», «Мантия эксперта» и «Воображаемое образование». Они вдохновляют любопытство, поощряют риск и создают поддерживающую среду для исследований. Демонстрируя креативность в своей собственной практике, учителя показывают гибкость и открытость к новым подходам. В конечном счёте, учителя формируют не только знания, но и образ мышления, необходимый студентам для будущего.

Ключевые слова: креативность, образование, учитель, воображение, модели.

İmanova Kəmalə Xalid qızı

Yaradıcılıq və onun təhsildə rolu

Xülasə

Yaradıcılıq — təxəyyülü reallığa çevirmək aktıdır, orijinallığı faydalılıqla birləşdirir. O, yalnız incəsənətlə məhdudlaşmır, elm, təhsil, biznes və gündəlik həyatda da mövcuddur. Alimlər yaradıcılığı «Dörd C» və «Dörd P» modelləri ilə izah edir, hansı ki, onun ideyalar, insanlar, nəticələr və mühit arasındakı qarşılıqlı təsirini vurğulayır.

Təhsildə yaradıcılıq problem həll etmə, tənqidi düşüncə və adaptasiya bacarıqlarının inkişafı üçün vacibdir. O, tələbələrin istedadlarını kəşf etməsinə, özünəinamını gücləndirməsinə və fərdiliyini ifadə etməsinə imkan yaradır. Tədqiqatlar göstərir ki, yaradıcı tədris akademik nailiyyətləri yaxşılaşdırır, psixi sağlamlığı dəstəkləyir və mühüm həyat bacarıqlarını inkişaf etdirir. Yaradıcı yanaşma həmçinin passiv biliyi aktiv araşdırmaya çevirərək öyrənməni daha mənalı edir.

Lakin ənənəvi təhsil çox vaxt əzbərləməyə, uyğunlaşmaya və standartlaşdırılmış imtahanlara diqqət yetirərək yaradıcılığı boğur. Araşdırmalar göstərir ki, uşaqlar yüksək yaradıcılıq potensialı ilə başlasalar da, sərt təhsil sistemi bunu kəskin şəkildə azaldır. Səhv etmək qorxusu, sərt kurikulum və muxtariyyətin olmaması eksperimentləri və orijinallığı məhdudlaşdırır. Bununla belə, yaradıcılıq heç vaxt tam itmir və məşq, eləcə də dəstəkləyici tədris metodları ilə yenidən oyadıla bilər.

Müəllimlər «Altı düşüncə papağı», «Ekspert mantiyası» və «Təsəvvüri təhsil» kimi innovativ metodlardan istifadə edərək yaradıcılığın inkişafında əsas rol oynayırlar. Onlar maraq oyadır, risk götürməyi təşviq edir və araşdırma üçün

dəstəkləyici mühit yaradırlar. Öz təcrübələrində yaradıcılığı nümayiş etdirərək müəllimlər elastiklik və yeni yanaşmalara açıqlıq göstərilər. Nəticə etibarilə, müəllimlər yalnız bilik deyil, həm də tələbələrin gələcək üçün ehtiyac duyduğu düşüncə tərzini formalaşdırırlar.

Açar sözlər: yaradıcılıq, təhsil, müəllim, təxəyyül, modellər.

References:

1. <https://www.britannica.com/topic/creativity/Research-on-the-creative-process>
2. <https://www.creativityatwork.com/what-is-creativity/>
3. <https://www.psychologytoday.com/us/basics/creativity>
4. <https://medium.com/@Creativityforchange/what-is-creativity-and-why-is-it-important-for-change-154bac69bd42>
5. <https://www.verywellmind.com/what-is-creativity-p2-3986725>
6. https://becre8v.com/blogs/news/what-is-creativity?srsId=AfmBOorAkTQHxBb8mcg_sI9Ddck1Hcx6Me8u8zsXh27pc8fCp9fZ57M6
7. https://dtbnwed.cbwe.gov.in/images/upload/Creativity-and-Innovation_YYB3.pdf
8. <https://www.dcu.ie/sites/default/files/inline-files/1.2-what-is-creativity.pdf>
9. <https://www.joinprisma.com/blog/why-is-creativity-important-in-education>
10. <https://medium.com/@arsh.ace7/the-power-of-creativity-in-education-unlocking-the-potential-of-underprivileged-children-afca8a32d5c8>

Rəyçi: prof. Məmmədova Z.Ş.