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EXPLORING

INFLUENTIAL FACTORS IN FOSTERING CREATIVE THINKING IN PRIMARY SCHOOL EDUCATION

EXPLORACIÓN DE FACTORES INFLUYENTES EN EL FOMENTO DEL PENSAMIENTO CREATIVO EN LA EDUCACIÓN PRIMARIA

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ABSTRACT

Today, the development of students' creative skills and personal growth are critical to their success in life and society. The development of these skills is essential to meet the challenging demands of our time. However, while the importance of creativity is widely recognized, a comprehensive understanding of the conditions and factors that determine the development of creativity, particularly in primary education, is lacking. Thus, this study aims to identify the most relevant elements for the development of creativity in children. Research shows that a well-designed educational process and appropriate learning strategies have a significant impact. Early curricula, teaching methodologies, and teacher approaches also play a critical role in the timely identification and reinforcement of creativity. As part of the study, the factors influencing the early development of creativity were separated into intrinsic and extrinsic factors, clarifying the role of each in the process. Based on the findings, recommendations were made to reduce the negative effects and enhance productivity growth. Finally, this research highlights the importance of improving teaching strategies to foster creativity, emphasizing the need for a holistic approach that addresses both the learning environment and individual student characteristics as part of primary education.

Keywords: Development, Personality, Creativity, Teaching, Curriculum, Primary school.

RESUMEN

Actualmente el desarrollo de las habilidades creativas y el crecimiento personal de los estudiantes son fundamentales para su éxito en la vida y la sociedad. El desarrollo de estas habilidades es esencial para satisfacer las exigentes demandas de este tiempo. No obstante, si bien la importancia de la creatividad es ampliamente reconocida, falta una comprensión integral de las condiciones y factores que determinan el desarrollo de la creatividad, en particular en la educación primaria. Así, este estudio tiene como objetivo identificar los elementos más relevantes para el desarrollo de la creatividad en los niños. La investigación muestra que un proceso educativo bien diseñado y estrategias de aprendizaje apropiadas tienen un impacto significativo. Los planes de estudio tempranos, las metodologías de enseñanza y los enfoques de los maestros desempeñan igualmente un papel fundamental en la identificación y el refuerzo oportunos de la creatividad. Como parte del estudio se separaron los factores que influyen en el desarrollo temprano de la creatividad en factores intrínsecos y extrínsecos, aclarando el papel de cada uno en el proceso. Con base en los hallazgos, se hicieron recomendaciones para reducir los efectos negativos y mejorar el crecimiento de la productividad. Finalmente, esta investigación destaca la importancia de mejorar las estrategias de enseñanza para fomentar la creatividad, enfatizando la necesidad de un enfoque holístico que aborde tanto el entorno de aprendizaje como las características individuales de los estudiantes como parte de la educación primaria.

Palabras clave: Desarrollo, Personalidad, Creatividad, Enseñanza, Currículo, Escuela primaria.

INTRODUCTION

Human development is a lifelong process, commencing from the womb. However, this developmental trajectory is not uniform across all age periods. Certain periods are marked by heightened sensitivity, contingent upon various factors including the environment, both internal and external, with a notable example being the span from 6 to 10 years. During these times, individuals may experience a sense of having their thoughts and feelings manipulated. External influences, such as family dynamics, the surrounding environment, the educational system, and organizational-bureaucratic factors, contribute to these effects. Conversely, internal reactions to external influences can also shape one's thoughts and emotions. Awareness of these obstacles enables individuals to more easily overcome them. Internal factors, encompassing personal characteristics, cognitive abilities, interests, and desires, stand in contrast to external factors like societal influences, the environment, and education.

The formative influence of training and education is a pivotal aspect of an individual's development. In contemporary times, the learning process revolves around cognitive activities. The primary goal of education is not merely to impart informational knowledge, but rather to instill essential life skills (Lucchiari et al., 2019). The overarching objective is to cultivate a competitive personality capable of independent learning, critical thinking, practical application, possessing flexible and creative thinking abilities, being unafraid of challenges, and being adept at problem-solving. Moreover, due consideration must be given to nurturing children's creative abilities within the educational framework. The future success of students hinges on the development of foundational skills, including creativity. The efficacy of endeavors in this direction heavily relies on the timely implementation of relevant measures. Consequently, instilling creative skills in young schoolchildren emerges as a critical necessity (Avcı & Yildiz, 2023).

By creative thinking within the context of primary education, we refer to young students' capacity to develop original ideas, engage in divergent thinking, and tackle problems from innovative approaches (Van Hooijdonk et al., 2023). This cognitive ability encompasses several processes, including: 1) fluency (the capacity to generate numerous ideas or solutions to a given problem), 2) flexibility (the aptitude for considering different perspectives and generating ideas across various categories), 3) originality (the ability to create unique, uncommon, or innovative ideas and 4) elaboration (the skill of expanding and refining ideas by adding details and complexity) (Liu et al., 2024). To accomplish these goals, creative thinking may be nurtured in primary education through different activities such as:

- **The integration of fine arts into academic disciplines:** For example, incorporating art into math lessons has been demonstrated to enhance students' intrinsic motivation, visual creativity, and mathematical thinking skills (Azaryahu et al., 2024).
- **Practicing sports:** Sports promote mental flexibility, enhance problem-solving skills, and encourage strategic thinking (Maiden et al., 2023), which is quite evident in chess or GO players. But also, it is well-known that engaging in physical activities stimulates brain function leading to the development of new neural pathways, which are crucial for creativity.
- **Use of technology:** The use of robotics or artificial intelligence (AI) can foster creative thinking by offering new tools and platforms for experimentation and problem-solving. These technologies enable students and professionals to explore innovative ideas, design complex solutions, and tackle challenges in unconventional ways. These systems can stimulate curiosity and/or promote adaptability (Çakır et al., 2021; Fakaruddin et al., 2024).

As seen above, creative thinking is crucial in education, as it enhances essential skills such as problem-solving, adaptability, and deep understanding of knowledge. Fostering creative thinking allows students to approach challenges from innovative perspectives, a meta-skill that not only improves their ability to deal with complex situations but also prepares them for a 21st-century work environment where innovation and the ability to think "outside the box" are highly valued (Dilekçi & Karatay, 2023). Furthermore, by integrating creative activities into the educational process students feel more motivated leading to better engagement and ultimately facilitating learning. This way, creative thinking skills development in primary education aims to educate students to become more curious, innovative, and adaptable learners (Vásquez, 2021).

In today's global landscape, including Azerbaijan, the concept of creativity holds significant prominence (Zeynalova, 2018, p. 129). The development of creative potential has evolved into a vital concern in Azerbaijan, seamlessly integrating into the broader sphere of world education. In the history of Azerbaijani psychological thought, the significant role of creative activities, particularly imagination and thinking, in the formation of personality is extensively discussed in the research of Rashid Cabbarov. The author highlights that imagination holds a distinct significance in creative processes, irrespective of whether they are learned beforehand or not (Cabbarov, 2022, p. 119). It should also be noted that there is a substantial need for research in this field within Azerbaijan, as there are relatively few

studies conducted in this area. Therefore, to fill this gap, the objective of this research is to analyze the most relevant factors to promote creative thinking in primary education.

MATERIALS AND METHODS

To achieve a solid understanding of creativity, academic literature was reviewed, but field information was also collected. Participants for this study were selected from various educational institutions across Azerbaijan, representing a diverse range of ages, backgrounds, and socioeconomic statuses. Informed consent was obtained from both parents and guardians of minors, with ethical considerations adhering to the guidelines set forth by relevant institutional review boards. The study employed a mixed-methods approach, combining quantitative assessments with qualitative interviews and observations to provide a comprehensive understanding of creativity development among schoolchildren.

Quantitative assessments included standardized tests measuring creative thinking abilities, cognitive flexibility, problem-solving skills, and self-efficacy. Qualitative interviews and observations were conducted to gain insights into individual experiences, perceptions of creativity, and the influence of external factors on creative development. Creative interventions were designed and implemented within the educational framework, targeting various aspects of creativity such as imagination, divergent thinking, and problem-solving. Interventions included interactive workshops, creative projects, storytelling sessions, collaborative activities, and exposure to diverse stimuli to stimulate creative expression and innovation.

RESULTS AND DISCUSSION

Influential factors in fostering creative thinking in primary school education

What to do "creatively"? The original meaning of the word "creative", which entered English in the early 14th century, signifies "to create". In the modern English dictionary, the term "creative" refers to approaching a problem or situation from a new perspective, often manifested as an activity related to generating novel ideas or crafting physical objects. These meanings are presented as synonyms for "creative":

- to have the power and merit to create;
- a new imagination originating from the original idea, or expression;
- originality, productivity;
- create something that seems unrealistic (Yusifova & Feteliyeva, 2019, p. 27).

Liane Gabora noted that "Creativity is arguably our most uniquely human trait. It enables us to escape the present, reconstruct the past, and fantasize about the future, to envision something that does not exist and change the world with it" (Gabora, 2013, p. 1515). Advancing our understanding of creativity not only enriches our knowledge of human cognition but also holds profound implications for education, innovation, and societal development. By fostering a culture that values and nurtures creativity, we can unlock the full potential of human ingenuity and pave the way for transformative advancements in diverse fields.

If activity is a process, then creativity is a potential possibility (Akhundova, 2013, p. 4). Creative potential can be measured by human creative capabilities, including the variety and breadth of creative products. "The practice and testing of creative achievements enable us to conclude that the psychological basis of creativity lies in the ability to construct creative fantasy, understood as a synthesis of empathy and imagination" (Reshidi, 2010, p. 108).

Creative skills and creative thinking can be developed through education and the creation of a conducive environment. At its core, creative pedagogy teaches students to learn innovatively and become creators of the future. Creativity is typically characterized as the ability to solve a problem in an original, unusual, yet practical way.

As one of the factors influencing the development of creativity, it is crucial to highlight the application of advanced learning technologies. In education aimed at fostering creativity, identifying and embracing the individual potential of each personality should be regarded as the main principle, forming the basis for the pedagogical process. Even a creative teacher cannot succeed within an authoritarian teaching system that denies innovation and open-mindedness. The value of creativity is substantial and undeniable, not only for individuals but also for the entire society (Bakhsheliyev, 2011, p. 45).

The appropriate and sophisticated utilization of new pedagogical technologies plays a pivotal role in fostering the holistic development of learners within the educational process, ultimately leading to the achievement of superior outcomes. In today's dynamic learning landscape, where technology continually evolves, educators must strategically integrate these tools to empower learners to become well-rounded individuals equipped with the skills and knowledge necessary for success in various facets of life (Nazarov, 2012, p. 12).

In this context, it becomes imperative to meticulously select pedagogical technologies that resonate with the specific objectives and content of the training program. Whether it involves interactive simulations, virtual reality experiences, collaborative online platforms, or adaptive learning systems, each technology should be carefully chosen to complement the curriculum and enhance the learning experience.

The implementation of these technologies should follow a coherent and well-defined plan, guided by a pre-established timeframe. This ensures that the integration process is smooth and seamless, minimizing disruptions to the learning journey while maximizing the benefits derived from these innovative tools.

By embracing a strategic approach to the incorporation of pedagogical technologies, educators can create an enriched learning environment that caters to the diverse needs and preferences of learners. Moreover, by fostering digital literacy and adaptability, students are better prepared to thrive in an ever-changing world where technological proficiency is increasingly vital. The effective utilization of new pedagogical technologies not only enhances the educational experience but also nurtures the development of learners into well-rounded individuals capable of navigating the complexities of the modern world with confidence and proficiency.

Studies have proven that the use of modern learning methods, such as the project method and game technologies, activates the imagination more effectively than passive lecture and memorization methods (Zeynalova, 2019b, p. 30). The emergence of a new, creative paradigm in education creates conditions for self-awareness, self-defense, and the selection of optimal strategies in various situations. In modern times, it is impossible to envision the educational landscape without the integration of creative pedagogical and psychological training technologies (Zeynalova, 2018, 2019a). The educational value of creativity is increasing every year. Creativity serves as the basis and foundation for the development of activities and training in any context. Joint creative activities across all domains result in high productivity.

Creative ideas are also stimulating. Various means of communication further expand their scope and disseminate them in different directions. Experience shows that students have a wide range of opportunities to develop creative thinking.

In general, the development of creative skills in students, including elementary school students, has a positive effect on their understanding and enhances the quality of education (Zeynalova, 2019a, p. 7).

According to Steinberg, emotion and perception play a significant role in the development of creativity. Poor perception creates difficulties in distinguishing and clarifying problems, recognizing terms and concepts, differentiating relationships, and selecting cause-and-effect connections. Weakness in terms of emotions and feelings manifests as a lack of self-confidence, putting oneself in the position of a fool, fear of making mistakes, inflexibility of thinking, acceptance of the first idea that comes to mind, a desire for immediate success, feeling the need for support, dependence, distrust of others, fear of tests and manifests itself in signs such as reluctance to work and problem-solving (Tedik, 2014, p. 333).

Research has proven that the physical, mental, emotional, and social development of a child at a young age influences their entire life in various ways. In this regard, introducing creative experiences and fostering creative thinking in children from an early school age helps ensure the development of creative skills in their future. Schools, and specifically teachers, need to encourage students more to take risks with their newly acquired skills. Taking risks is difficult for creative students because creativity is not always rewarded with good grades (Sternberg & Lubart, 1991).

How to cultivate creativity in an individual? A person opens their eyes to the world as an individual and forms their personality under the influence of various factors. They transform from biological beings into social beings. Social, economic, political, and other changes in society impact the development of an individual's personality in diverse ways. As a consequence of these influences, students' needs, interests, views, and attitudes toward people and events around them undergo changes.

Although personality development is often assessed based on age periods, not all children of the same age exhibit the same level of development. There are several reasons for this. Identifying and addressing these factors demands significant pedagogical competence from teachers. Teachers may sometimes assume that special talent can only exist in students who are disciplined, diligent, and possess high learning qualities. However, at times, students with extraordinary abilities can be found among those who present challenges. The crucial aspect is to recognize these students promptly and create the necessary conditions for them to develop their abilities. This is important because sometimes the students themselves may not be aware of their exceptional talents (Ceferova, 2017, p. 34).

Creativity is inherently a characteristic of a child's nature. Environmental factors can either foster and develop this

characteristic into a creative ability or diminish it to the point of disappearance. A child first opens their eyes to the world within the family, where the family environment lays the foundation for the child's initial development. From this perspective, the upbringing process within the family should be properly organized, creating comprehensive conditions for the child's development. Comprehensive thinking in a child initiate with self-knowledge and discovery, then progresses to an understanding of others and the surrounding world. The role of preschool education programs is also crucial in fostering the critical and creative thinking of the child at an early age (Karakush, 2019).

Special efforts should be directed toward identifying talented children in kindergartens, general education institutions, and other educational settings. This doesn't necessarily require a dedicated laboratory or intricate research. It can be achieved through simple means like questionnaires, relying on the opinions of parents and teachers. Children's abilities can be assessed across various subjects such as art, mathematics, reading, music, and social activities. Under typical circumstances, identifying a gifted student can be accomplished through observation, tests, storytelling, legends, riddles, and wisdom (Eliyeva & Bakhseliyev, 2018, p. 46).

Creativity itself is a talent, an ability. We can list the factors that play a role in the development of this ability as follows:

- Character traits
- Age
- Socio-economic factors
- Prior experience
- Mind, intellect
- Teacher's approach
- Environment and family
- Training methods
- Training technologies
- Educational programs (Ceferova, 2017, p. 44).

One of the factors that play a role in the development of creative skills is the mind, intelligence, and the level of intelligence. In the process of receiving and processing information from nature and the object of research, intelligence is the ability of a person to evaluate that information, select relevant elements, group them into established knowledge, formulate a theorem, law, or scheme, create an optimal decision, project, method, and determine appropriate behavior (Mehdi, 2011, pp. 13–14). Yoed N. Kenett noted that "the human mind can be extremely flexible as we solve problems and create new ideas, in an increasingly complex world" (Kenett, 2024, p. 1).

The exploration of the intricate relationship between intelligence and creativity has been the subject of numerous studies, yet the establishment of an exact and conclusive correlation remains elusive. While individuals scoring high on intelligence tests may exhibit cognitive prowess in certain domains, an intriguing observation surfaces: they may encounter challenges in the realm of unfettered ideation and spontaneous thinking across diverse situations. This nuanced dynamic underscores the assertion that creativity, as a multifaceted cognitive phenomenon, necessitates not only a foundation of high intelligence but also the cultivation of comprehensive thinking abilities.

The conventional metrics used to assess intelligence, often quantified through standardized tests, may capture certain cognitive capacities but might fall short of encapsulating the breadth of creativity. Creativity, by its nature, extends beyond the confines of structured problem-solving and linear thinking, requiring cognitive flexibility and the ability to traverse unconventional pathways of thought. Therefore, the conventional notion that high intelligence alone guarantees a proclivity for creativity proves inadequate in capturing the complexity of creative cognition.

It is crucial to recognize that creativity encompasses the capacity to generate novel ideas, explore uncharted territories of thought, and approach challenges with an open and imaginative mindset. Such cognitive processes involve not only analytical thinking, as measured by intelligence tests, but also the ability to engage in divergent thinking, make novel associations, and break away from established patterns of thought.

In essence, while intelligence undeniably represents a vital component in the intricate interplay with creativity, it stands as a necessary yet insufficient factor. The synthesis of high intelligence with comprehensive thinking and cognitive flexibility emerges as the bedrock for a more holistic understanding of creativity. This acknowledgment prompts a reevaluation of how we conceptualize and assess cognitive abilities, urging researchers and educators alike to embrace a more nuanced perspective that transcends traditional boundaries between intelligence and creativity.

To avoid societal condemnation, individuals may refrain from acting under their genuine feelings or aspirations to attain a desired status. The human cognitive system is also recognized as a factor that can impede creativity. Consequently, limitations in personal perspective, lack of knowledge, diminished intellectual capacity, apprehension of appearing ridiculous, aversion to risk-taking,

indecisiveness, and a deficit in self-confidence are identified as factors hindering the progression of creativity.

A child is born with inherent potential. Among the principal factors contributing to the transformation of these potentials into abilities, the environment plays a pivotal role in the child's education and development. The environment encompasses all social relations and aspects of social development pertinent to individuals. The diversity of the environment can at times both segregate and unify people with varying interests, inclinations, motives, convictions, imaginations, and ideologies.

Paul Torrance asserted that, in intercultural relations, creativity disseminates and influences from one culture to another, highlighting the distinct attitudes towards creativity evident in diverse cultures. This correlation was established in connection with the distinct needs and requisites for fostering creativity. The initial milieu a child encounters is the family. From the moment a child opens their eyes to the world, the familial environment, coupled with parental behavior, imparts lasting imprints on children, which can be either advantageous or detrimental. The initial cultivation of creativity takes root within the family structure. Research has demonstrated that children raised in families guided by democratic principles tend to exhibit higher levels of creativity. This phenomenon is attributed to the sense of freedom children experience during these formative years, wherein they feel unrestrained in posing questions about their areas of interest and expressing their thoughts and feelings without trepidation. Conversely, children may refrain from such expression, out of fear or a desire to avoid criticism, potentially impeding the development of a child's latent talents in any given field.

The engagement of an individual with their environment activates a spectrum of emotions and feelings. It is essential to instruct a child on what needs to be done without dictating the method. During this phase, children may astound observers with their inventive capabilities. Creativity extends beyond the act of conjuring something novel from scratch; it involves modifying, arranging, and repurposing existing elements for different ends. A child's capacity to craft something innovative based on personal experience, coupled with the ability to articulate feelings and thoughts in symbolic forms, is indicative of a healthy perception and thought process. Such children demonstrate enhanced observational skills, analytical capabilities, and the adeptness to establish connections between objects and events (Cebrayilov, 2015, p. 266).

In certain studies, the birth order of children within a family has been identified as a factor influencing the development of their abilities. Most commonly, it is observed that middle and younger children tend to exhibit higher levels of creativity compared to the eldest child in the family. This association is linked to the increased attention, care, and affection provided by parents to younger children.

To facilitate the comprehensive development and support of their child, parents should carefully consider the following recommendations:

- Avoid exerting undue pressure on the child.
- Evaluate their successes constructively.
- Refrain from excessive criticism.
- Avoid an overly conservative approach.
- Prevent discrimination between children within the family.
- Foster the creation of a loving and secure family environment.

Parents ought to encourage their children's imaginative pursuits and allow them to freely express their thoughts. The genesis of creativity often resides in dreams and fantasies, as the process begins with the reconfiguration of ideas associated with human perception and memory, amalgamating them in novel ways. It is widely acknowledged that even works deemed fantastical can materialize into reality over time. For instance, out of Jules Verne's one hundred and eight fantastical ideas, merely ten were proven inaccurate. Furthermore, in Yusif Vazir Chamanzaminli's 'Future City,' what was once considered fantasy for its time has since manifested as reality (Agayev, 2017, p. 24).

At times, children exhibit a preference for engaging with older items such as buckets, wood, and glass containers rather than commercially available toys or adorned dolls. They often engage in crafting various toys, robots, and furniture from reclaimed materials. In this context, it is imperative to foster a sense of freedom for the child within defined limits established by the family. Encouraging children to gain hands-on experience by disassembling pre-made toys and creating something new from recycled materials is essential. This process allows them to experiment, verify, and make discoveries, thus supporting their learning and fostering a sense of curiosity. Children should not face punitive measures for their mistakes and interests. During play, prohibitions such as 'break,' 'scatter,' or 'be careful' should be minimized as much as possible (Tedik, 2014, p. 333).

Moreover, it is acknowledged that the educational attainment and worldviews of parents contribute significantly to the development of creativity and other abilities in

children. Additionally, empirical evidence indicates that children raised in families with a favorable financial status exhibit higher levels of creativity compared to their counterparts from low-income families (Karsak, 2016, p. 554).

Age plays a crucial role in creativity. According to conducted studies, it can be asserted that creativity is notably prominent in children up to 5-6 years old. A child's imaginative faculties commence development within the first two years of life. During this period, children actively engage with their environment through sensory exploration, utilizing touch, sight, and traction, displaying an inherent curiosity towards diverse stimuli. Between the ages of 2 to 4, children exhibit an increased desire for autonomy, attempting to undertake tasks independently. This self-initiated engagement serves to fortify their abilities, fostering creative endeavors such as crafting imaginative toys from various objects and tools. Parents are advised to adopt a sensitive approach towards children's creations, embracing and acknowledging their efforts without attempting to alter or modify them. From the age of 4 to 6, children demonstrate an enhanced capacity to construct games, establish rules, plan, and discern connections between events, thereby advancing their cognitive and creative learning processes.

Beyond the age of 6, as a child embarks on their educational journey and enters a novel scholastic environment, various factors come into play influencing the development of creative abilities. These encompass the school infrastructure, learning environment, the role of teachers, the organization of the teaching process, pedagogical methods, instructional technologies, educational programs, textbooks, and teaching aids.

Educational programs play a crucial role in shaping and enhancing creative skills, especially during the formative years in primary classes when students demonstrate substantial potential for intellectual and imaginative growth. It is imperative to recognize that imposing excessive restrictions and constraints on both educators and students can inadvertently lead to passivity and hinder the development of creative thinking. Beyond the confines of the traditional classroom, such constraints also have a ripple effect on extracurricular activities, limiting the avenues through which students can explore and express their creativity.

In alignment with the philosophical principles of Jean Piaget, it is essential to acknowledge that the primary educational objective extends beyond the mere impartation of extensive knowledge. Rather, it encompasses the cultivation of cognitive abilities that empower students to actively participate in the process of making discoveries and inventions. By fostering an environment that encourages curiosity, critical thinking, and problem-solving, educators contribute significantly to nurturing a generation of learners who not only acquire knowledge but also possess the skills to apply that knowledge creatively in various contexts. This approach not only enriches the educational experience but also prepares students to navigate an ever-evolving, complex world with adaptability and innovative thinking.

In primary classes, the role of the teacher is crucial, and certain principles should be acknowledged:

- The teacher must exhibit respect for the individuality of each student
- Serving as a constant positive influence, the teacher should consistently exemplify good conduct
- Allocating time to engage with students not only during class hours but also after class fosters a supportive environment
- The teacher must instill in students the belief that they can attain excellence and be the best version of themselves
- Students should be treated with sensitivity, and any form of discrimination among them must be avoided (Tedik, 2014).

The authentic connection and rapport established between teachers and students in primary classes stand as a significant factor influencing creativity. Consequently, the frequent rotation of teachers in primary classes not only detrimentally impacts students' academic outcomes but also hinders their emotional and psychological development. The process of adaptation, acclimatization, and the cultivation of a sense of freedom and confidence with each new teacher results in a discernible loss of time for students. Furthermore, research indicates that the teacher's approach, whether democratic or authoritarian, yields distinct effects on students.

Throughout the educational process, educators should prioritize the careful selection of instructional methods, technologies, tools, and tasks. A commitment to employing flexible methods is essential. The designated tasks ought to stimulate students to engage in independent thinking and active participation. Ideally, tasks should transcend conventional test formats and instead adopt structures such as completing logical sequences, interpreting visual narratives, concluding unfinished stories, and engaging in constructive exercises. Cultivating in students the resilience to perceive setbacks not as defeat but as opportunities for growth is paramount. For instance, the dedication exhibited by Einstein, who spent seven years refining the theory of relativity, serves as a notable illustration.

In the primary grades, an overly logical approach by educators may impede the holistic development of students. Excessive pressure, strict disciplinary measures, and an imbalance between rigidity and permissiveness can detrimentally impact both the quality of education and the overall development of students' abilities (Karsak, 2016, p. 563).

Life and our own previous experiences show that the advancement of society relies less on teaching students how to solve presented problems; instead, students must be prepared for unforeseeable and unpredictable future issues by being provided with ill-defined problems and tasks to make them sensitive to both current and future problems (Abdulla et al., 2023, p. 16).

Educational programs play a crucial role in shaping and enhancing creative skills, especially during the formative years in primary classes when students demonstrate substantial potential for intellectual and imaginative growth. It is imperative to recognize that imposing excessive restrictions and constraints on both educators and students can inadvertently lead to passivity and hinder the development of creative thinking. Beyond the confines of the traditional classroom, such constraints also have a ripple effect on extracurricular activities, limiting the avenues through which students can explore and express their creativity. Solange Denervaud asserts, "Our research reveals a significant role of educational disparities in shaping children's creative thinking" (Denervaud et al., 2021, p. 4).

In alignment with the philosophical principles of Jean Piaget, it is essential to acknowledge that the primary educational objective extends beyond the mere impartation of extensive knowledge. Rather, it encompasses the cultivation of cognitive abilities that empower students to actively participate in the process of making discoveries and inventions. By fostering an environment that encourages curiosity, critical thinking, and problem-solving, educators contribute significantly to nurturing a generation of learners who not only acquire knowledge but also possess the skills to apply that knowledge creatively in various contexts. This approach not only enriches the educational experience but also prepares students to navigate an ever-evolving, complex world with adaptability and innovative thinking. Thus, a teacher aiming to nurture creativity in students should promote self-expression, refrain from stifling emotional articulation, dedicate ample time, and furnish essential resources. Fundamentally, the teacher should endeavor to create a setting that fosters an atmosphere conducive to the free expression of creativity.

Final observations

The exploration of factors influencing creative thinking in primary school education yielded multifaceted insights. The study illuminated various elements contributing to the development of creativity in students, encompassing both intrinsic and extrinsic factors. These findings underscore the complex interplay between environmental influences, educational practices, familial dynamics, and individual characteristics in shaping creative abilities. Notably, key factors influencing the cultivation of creativity in primary school students can be highlighted:

- **Advanced Learning Technologies:** The application of modern learning methods, such as the project method and game technologies effectively activate imagination and foster creative thinking among students.
- **Educational Environment:** Creating a conducive learning environment that values individual potential and encourages innovation emerges as a critical factor in fostering creativity. Flexible pedagogical approaches that prioritize student engagement and active participation were highlighted as essential components of such environments.
- **Teacher's Approach:** The role of the teacher is pivotal in nurturing creativity in students. Teachers who adopt a democratic approach, emphasizing collaboration, open-mindedness, and encouragement of diverse perspectives significantly impact students' creative development.
- **Family Environment:** The family environment is recognized as the primary context for early development and the cultivation of creativity. A supportive and nurturing family environment, characterized by freedom of expression, constructive feedback, and encouragement of exploration, was deemed essential for fostering creative thinking in children.
- **Educational Programs:** The design and implementation of educational programs play a crucial role in shaping creative skills among primary school students. Curricula that incorporate interactive and thought-provoking exercises, promote experiential learning, and embrace student-centered approaches were identified as conducive to fostering creativity.
- **Intellectual Development:** The relationship between intelligence and creativity highlights the nuanced dynamics between cognitive abilities and creative thinking. While intelligence represents a foundational

component, creativity necessitates comprehensive thinking, cognitive flexibility, and the ability to think divergently.

CONCLUSIONS

A meticulous examination of the diverse elements discussed underscores that the creation of optimal conditions for the development of student's abilities is a multifaceted endeavor. A judiciously organized upbringing process within the family, marked by the absence of undue restrictions and constructive criticism, forms a foundational pillar in creative thinking development. This is complemented by the strategic selection and application of educational philosophies, precise delineation of objectives, and the adoption of a strategic approach. The provision of technical support, meticulous organization of the learning environment, and placing the student at the heart of the learning process further contribute to the holistic development of abilities.

A pivotal aspect involves the recognition and incorporation of the student's interests, wishes, and suggestions into the educational framework. Enriching lesson programs, textbooks, and teaching aids with thought-provoking, interactive exercises enhance the learning experience. Collaborative initiatives and a cooperative atmosphere further amplify the conducive conditions for multifaceted development. Crucially, fostering creatively thinking young individuals necessitates a nuanced equilibrium between freedom and discipline, experience and knowledge. Embracing innovation becomes integral in sculpting an educational environment that not only imparts knowledge but also cultivates the skills and mindset necessary for creative thinking and problem-solving. In essence, by weaving these elements together, educators and stakeholders can pave the way for a holistic and dynamic educational experience that nurtures the multifaceted potential of each student.

REFERENCES

Abdulla Alabbasi, A. M., Reiter-Palmon, R., & Acar, S. (2023). Problem finding and divergent thinking: A multivariate meta-analysis. ***Psychology of Aesthetics, Creativity, and the Arts***. https://doi.org/10.1037/aca0000640

Agayev, E. (2017). Fantasy develops creative imagination. ***School of Azerbaijan***, ***1***, 22–26.

Akhundova, E. (2013). Unity of creative and critical thinking in the professional development of personality. ***Psychology***, ***4***, 3–16.

Avcı, Ü., & Yildiz Durak, H. (2023). Innovative thinking skills and creative thinking dispositions in learning environments: Antecedents and consequences. ***Thinking Skills and Creativity***, ***47***, 101225. https://doi.org/10.1016/j.tsc.2022.101225

Azaryahu, L., Broza, O., Cohen, S., Hershkovitz, S., & Adi-Japha, E. (2024). Development of creative thinking via fractions and rhythm. ***Thinking Skills and Creativity***, ***52***, 101514. https://doi.org/10.1016/j.tsc.2024.101514

Bakhsheliyev, E. T. (2011). ***The social-psychological nature of Azerbaijan's national-spiritual values***. Science and Education.

Cabbarov, R. (2022). ***Creating pysicalogy***. Optimist Publishing House.

Çakır, R., Korkmaz, Ö., İdil, Ö., & Uğur Erdoğmuş, F. (2021). The effect of robotic coding education on preschoolers' problem solving and creative thinking skills. ***Thinking Skills and Creativity***, ***40***, 100812. https://doi.org/10.1016/j.tsc.2021.100812

Cebrayilov, İ. (2015). ***Scientific-theoretical problems of modernization of education***. Murtecim Publishing House.

Ceferova, N. (2017). Consideration of individual-psychological characteristics in the formation of gifted students. ***School of Azerbaijan***, ***3***, 37–46.

Denervaud, S., Christensen, A. P., Kenett, Y. N., & Beaty, R. E. (2021). Education shapes the structure of semantic memory and impacts creative thinking. ***Npj Science of Learning***, ***6***(1), 1–7. https://doi.org/10.1038/s41539-021-00113-8

Dilekçi, A., & Karatay, H. (2023). The effects of the 21st-century skills curriculum on the development of students' creative thinking skills. ***Thinking Skills and Creativity***, ***47***, 101229. https://doi.org/10.1016/j.tsc.2022.101229

Eliyeva, S., & Bakhseliyev, E. (2018). Psychopedagogical characteristics of gifted children. ***School of Azerbaijan***, ***1***, 42–48.

Fakaruddin, F. J., Shahali, E. H. M., & Saat, R. M. (2024). Creative thinking patterns in primary school students' hands-on science activities involving robotics as learning tools. ***Asia Pacific Education Review***, ***25***(1), 171–186. https://doi.org/10.1007/s12564-023-09825-5

Gabora, L. (2013). Psychology of Creativity. In E. G. Carayannis (Ed.), ***Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship*** (pp. 1515–1520). Springer. https://doi.org/10.1007/978-1-4614-3858-8_386

Karakush, C. (2019). The place of thinking skills in preschool educational program achievements. ***International Social Sciences Studies Journal***, ***5***, 6053–6061. https://doi.org/10.26449/sssj.1839

Karsak, H. G. O. (2016). Research on creativity skills of the students who have and haven't changed their homeroom teacher<p>Öğretmen değiştiren ve değiştirmeyen öğrencilerin yaraticilik becerilerinin incelenmesi. ***Journal of Human Sciences***, ***13***(1), 551–568.

Kenett, Y. N. (2024). The Role of Knowledge in Creative Thinking. ***Creativity Research Journal***, 1–8. https://doi.org/10.1080/10400419.2024.2322858

Liu, W., Huang, R., Wang, J., Chen, Y., Ohashi, T., Li, B., Liu, Y., Qiu, D., Yu, R., Zhang, J., Al Mahmud, A., & Leifer, L. (2024). Empathy Design Thinking: Cultivating creative minds in primary education. ***Frontiers in Education***, ***9***. https://doi.org/10.3389/feduc.2024.1376305

Lucchiari, C., Sala, P. M., & Vanutelli, M. E. (2019). The effects of a cognitive pathway to promote class creative thinking. An experimental study on Italian primary school students. ***Thinking Skills and Creativity***, ***31***, 156–166. https://doi.org/10.1016/j.tsc.2018.12.002

Maiden, N., Lockerbie, J., Zachos, K., Wolf, A., & Brown, A. (2023). Designing new digital tools to augment human creative thinking at work: An application in elite sports coaching. ***Expert Systems***, ***40***(3), e13194. https://doi.org/10.1111/exsy.13194

Mehdi, T. (2011). ***How the world is,how it works***. Publication of the Public Union for a Rational Society. https://kitabxana.nmi.edu.az/wp-content/uploads/2020/09/Tofiq-Mehdi.Dunya-nec%C9%99diro-nec%C9%99-isl%C9%99yir..pdf

Nazarov, A. (2012). ***Modern training technologies***. Publications of ADPU. http://anl.az/el/Kitab/Azf-269214.pdf

Reshidi, S. M. (2010). Creativity and personality. ***Psychology***, ***3***, 107–113.

Sternberg, R. J., & Lubart, T. I. (1991). An Investment Theory of Creativity and Its Development. ***Human Development***, ***34***(1), 1–31.

Tedik, G. (2014). The effect of creative drama activities implemented in the 4th grade of primary school on students' creativity skills. ***Journal of Turkish Research Institute***, ***52***, 331–350.

Van Hooijdonk, M., Mainhard, T., Kroesbergen, E. H., & Van Tartwijk, J. (2023). Creative problem-solving in primary school students. ***Learning and Instruction***, ***88***, 101823. https://doi.org/10.1016/j.learninstruc.2023.101823

Vásquez, S. (2021). Creative thinking strategies: A view from basic education. ***Revista Innova Educación***, ***3***(4), 110-122. https://doi.org/10.35622/j.rie.2021.04.008

Yusifova, A., & Feteliyeva, V. (2019). ***Aesthetics and cultural self-interest***. Published by the Vocational Training Agency.

Zeynalova, N. (2018). The content of the concepts of creativity and innovation in the conditions of globalization. ***Azerbaijan University of Languages Scientific News***, ***3–4***, 128–134. https://doi.org/10.25045/NCInfoSec.2018.30

Zeynalova, N. (2019a). About the role of TEC, international experience, cooperation in the development of creativity. ***Pedagogy***, ***3***, 6–16.

Zeynalova, N. (2019b). Training methods for the development of creativity in high school students. ***Azerbaijan School***, ***2***, 42–50.