THE ROLE AND IMPORTANCE OF MATHEMATICAL CREATIVITY IN

EDUCATION

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Abstract. This article discusses what mathematical creativity is, the definitions and perspectives related to it, its role in education, and its importance. Additionally, it addresses the concepts of "Creative Mathematics" and "Mental Arithmetic" in education, and the differences between these concepts.

Key words: creativity, "Creative Mathematics," "Mental Arithmetic," mathematical potential.

РОЛЬ И ЗНАЧЕНИЕ МАТЕМАТИЧЕСКОГО ТВОРЧЕСТВА В ОБРАЗОВАНИИ

Аннотация. В этой статье обсуждается, что такое математическое творчество, определения и перспективы, связанные с ним, его роль в образовании и его важность. Кроме того, в ней рассматриваются концепции «Творческой математики» и «Ментальной арифметики» в образовании, а также различия между этими концепциями.

Ключевые слова: творчество, «Творческая математика», «Ментальная арифметика», математический потенциал.

INTRODUCTION

Creativity is one of the important aspects of mortal development, reflecting not only in the fields of art and literature but also in wisdom, technology, and diurnal life. Every individual possesses creative eventuality, and through the development of this capability, one discovers their identity. Creativity also facilitates problem- working approaches, the capability to induce new ideas, and innovative thinking in life situations. Although mathematics is unnaturally grounded on specific rules and algorithms, it also requires creativity. As Poyla (1957) defined," fine creativity encompasses the capacities related to independent thinking, logical logic, and the generation of novelty." These capacities are significant in developing scholars' chops in independent thinking and chancing their results.

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LITERATURE REVIEW

Tutoring styles aimed at enhancing scholars' creative eventuality have been validated in multitudinous studies. For case, according to tableware, "Creativity is directly related to deep and flexible knowledge in meaningful disciplines." Mann honored fine creativity as an essential skill that should be developed in all scholars. Indeed, the capability to creatively apply knowledge in specific situations, propose unique results using general fine algorithms, and find multiple different results to fine problems is considered a crucial factor for success. The 21st century, characterized by bits and bytes, proves the significance of mathematics and fine creativity in diurnal life. exploration by Getzels and Jackson (1962) and Torrens(1966) showed a significant correlation between creativity and academic achievement. Guilford(1974) concluded that although the impact of intelligence on creativity is kindly diminished, it remains significantly related to success.

Since creativity is a pivotal factor affecting academic achievement, it must be linked and nurtured. presently, creative mathematics and internal computation are used alongside each other in the educational process, leading to some confusion that these two generalities represent the same thing. While both are employed in colorful educational processes, there's a significant difference in their objects and approaches. Creative mathematics is an approach that encourages the development of new ideas, creative problem- working, and innovative operations of fine rules by scholars. This, in turn, allows scholars to expand their fine thinking and develop creative capacities. likewise, creative mathematics plays a pivotal part in developing creative thinking chops, problem- working, and encouraging critical thinking. Mental computation, on the other hand, focuses on developing the capability to perform quick and accurate computations.

It's aimed at speeding up the computation process and enhancing perfection. Mental computation helps scholars to perform introductory fine operations snappily and directly, contributing to their success in the literacy process. During the literacy process, internal computation education also fosters scholars' social and emotional chops, encouraging cooperation. The main differences between creative mathematics and internal computation are as follows

1. Educational pretensions:

➤ "Creative Mathematics " stimulates scholars by developing new ideas and creatively working problems. scholars learn to apply fine rules in practical life using creative approaches. For illustration, they learn to break their real-life problems using fine styles.

> "Mental computation" is concentrated on developing the capability to perform quick and accurate computations, abetting scholars in working fine problems fleetly. For illustration, in

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internal computation exercises, scholars learn to perform complex computation operations in a matter of seconds.

2. Approach:

> "Creative Mathematics " requires creative thinking and a broad contextual approach.

This approach enhances scholars' creativity in problem- working, allowing them to express and produce ideas in new ways.

➤ " Mental computation " combines traditional fine rules with logical logic to develop computation chops. This approach aids in performing fine processes snappily and directly. scholars learn to perform multiple computations contemporaneously, enhancing their attention and focus.

3. Achievable issues:

Creative Mathematics " develops scholars' innovative thinking and problem- working chops. They expand their fine thinking by creating their ideas and chancing new results.

Exploration indicates that "scholars using creative fine approaches ameliorate their logical and critical thinking chops".

✤ " Mental computation " enhances computation speed and delicacy, helping scholars to snappily execute introductory fine operations, performing in better performance in tests and other fine tasks. This boosts their overall fine chops and provocation.

RESULT AND DISCUSSION

Presenting scholars with creative approaches in the educational process is pivotal for developing creativity. Through creative problem- working, scholars expand their fine thinking chops. preceptors can encourage scholars' creative thinking by furnishing intriguing and engaging tasks. Concrete exemplifications are important for motivating scholars. For case, scholars should have the occasion to " produce geometric shapes using colorful styles " or " break problems creatively." also, STEM(wisdom, technology, engineering, and mathematics) education is a pivotal area that encourages scholars to be creative and suppose analytically. For illustration," in a study, scholars sharing in STEM programs achieved a clearer understanding of their capacities and bettered their creative thinking chops." Developing independent thinking chops allows scholars to break problems on their own, therefore enhancing their creative eventuality. By chancing their styles to break problems, scholars develop the capability to express their studies singly. preceptors can encourage independent allowing through group conversations, open- concluded questions, and creative design assignments. preceptors can apply colorful strategies to inspire creative thinking in scholars. For case, games, group work, and systems aimed at creative problem- working can motivate scholars. These approaches further broaden scholars' fine knowledge and inspire creativity. Particularly, preceptors can also foster creative thinking

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through innovative educational technologies, similar as online platforms and software. Introducing new subjects like rendering and robotics in seminaries helps scholars develop their fine thinking chops.

CONCLUSION

Therefore, creative mathematics and internal computation are reciprocal approaches, but their objects and styles differ significantly. Together, they play an important part in expanding scholars' fine knowledge and encouraging independent thinking and creative approaches.

Enhancing scholars' creative eventuality and developing independent thinking chops further emphasize the significance of creative mathematics and internal computation in the educational process.

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