

Journal of Mathematics Education

AlphaMath

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AlphaMath: *Journal of Mathematics Education*

AlphaMath: Journal of Mathematics Education is a mathematics education journal that presents articles from research results that are appropriate for the latest developments. AlphaMath is a peer-reviewed and open-access journal. AlphaMath is a journal published by the Department of Mathematics Education, Faculty of Teacher Training and Education, Universitas Muhammadiyah Purwokerto. AlphaMath invites lecturers, observers, mathematics education researchers, and mathematics teachers from various schools worldwide to exchange ideas and advance science in mathematics education.

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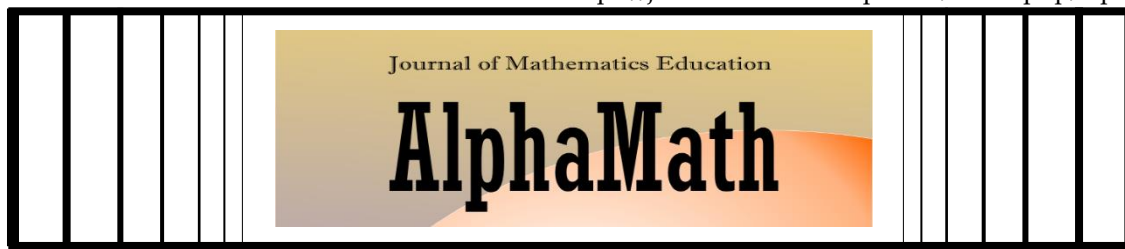


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FOREWORD

Praise the presence of Allah SWT for all the overflow of His Rahmat so that we can publish the journal AlphaMath volume eleven number one. It is with great enthusiasm that we present Alphamath: Journal of Mathematics Education, Volume 11, Number 1, published in May 2025. This issue brings together a rich collection of research articles that reflect the ongoing advancements and pedagogical innovations in the field of mathematics education.

The featured studies collectively highlight a dynamic landscape in which educators and researchers are increasingly integrating learner-centered strategies to improve mathematical understanding, problem-solving abilities, and collaborative competencies among students at various educational levels. The articles in this issue reflect a strong commitment to enhancing mathematics learning outcomes through thoughtful design, evidence-based approaches, and a focus on both cognitive and affective domains.

This issue opens with *Integrating Teaching at the Right Level with Problem-Based Learning* by Dewi Sukmawati et al., offering a practical model for addressing diverse learner needs through targeted and engaging instruction. Eny Suryowati and Nurul Aini explore cognitive processes in middle school students' *Correspondence Relationship Generalization*, contributing to our understanding of mathematical reasoning.

Innovative instructional approaches are central to this volume. *Reviving Algebra* by Muhamad Saleh and team advocates for discovery learning to boost student outcomes, while Reza Maulana and Dori Lukman Hakim emphasize the role of *Learning Independence* in building mathematical connections.

Assessment and diagnostic teaching are highlighted in *Analysis of Errors in Solving Monotonic Sequence Problems* by Novita Sari Maria Br Manullang et al., applying Newman's Taxonomy for insightful error analysis. Meanwhile, *Ludo Media Collaborative Fraction* by Siti Raihani Vesya and colleagues creatively demonstrates how game-based learning can foster both understanding and collaboration in elementary classrooms.

At the tertiary level, Mayang Gadih Ranti and Rinda Azmi Saputri present teaching materials infused with 4C skills—critical thinking, creativity, communication, and collaboration—addressing the evolving demands of higher education. Finally, Andi Ika Prasarti Abrar et al. investigate how the *Concept Acquisition Learning Model* enhances students' mathematical comprehension.

Together, the contributions in this volume offer valuable perspectives and practical implications for educators, researchers, and policymakers alike. We extend our sincere appreciation to the authors, reviewers, and editorial team whose efforts have made this publication possible. It is our hope that the research shared herein will inspire continued inquiry and innovation in mathematics education for years to come.

Editor-in-Chief

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