Enhancing Mathematical Proficiency in Primary Students Through Activity-Based Learning: A Study in Churchandpur District, Manipur

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Abstract

This study investigates the impact of activity-based learning (ABL) on the mathematical achievement of Class V students in Churchandpur District, Manipur, India. Responding to the decline in mathematics achievement observed in National Achievement Survey (NAS) data from 2017 to 2021, the research focused on two core competencies: Number System and Operations and Geometry. Employing a pretest-posttest control group design, the study involved 72 students from a government primary school, purposively selected to ensure diverse representation and over a four-week ABL intervention incorporated hands-on activities, manipulatives, and group-based learning to deepen students' understanding of mathematical concepts. Data collection included a 30-item questionnaire aligned with the NAS model to assess competencies in pre- and post-intervention. Findings revealed statistically significant improvements ($p < 0.001$) across both competencies, with mean Number System and Operations scores increasing from 5.46 to 7.63 and Geometry from 3.51 to 8.67. Notably, gender differences in pretest scores narrowed post-intervention, suggesting ABL's role in promoting gender-equitable learning outcomes. These results endorse ABL as an effective method for improving mathematics achievement and advocate for its integration into primary education to enhance understanding engagement and promote equitable, in-depth mathematical learning.

Key Words: activity-based learning, mathematics achievement, primary education, gender equity, action research.

Introduction:

Primary mathematics education is crucial for developing cognitive skills, logical reasoning, and problem-solving abilities for real-world applications (Paulin & Mugiraneza, 2023). However, the National Achievement Survey (NAS) indicates a significant decline in mathematics performance among Class 5 students in Churchandpur District, Manipur, with scores falling from 58% in 2017 to 40% in 2021. The state average dropped from 61.67% to 44% during the same period (NCERT, 2017, 2022). This trend underscores the necessity for alternative instructional methods, such as Activity-Based Learning (ABL), which replaces rote memorization with active engagement through hands-on activities to foster critical thinking and problem-solving skills (Vansdadiya et al., 2023).

ABL is gaining recognition as an effective pedagogical strategy promoting active student participation, emphasizing practical problem-solving and critical thinking, and enhancing conceptual understanding of mathematics (Vansdadiya et al., 2023). Grounded in constructivist theory, ABL encourages students to construct knowledge through experience and interaction with their environment. This method supports a deeper understanding of mathematical concepts through practical applications, interactive group work, and experiential activities.

This action research study investigates the impact of ABL on the mathematical achievement of Class V students in Churchandpur District, focusing on two challenging competency areas identified in the NAS data:

- Number System and Operations - covering measurement relationships and unit conversions, and
- Geometry – covering the area and perimeter of basic shapes like triangles and rectangles.

Research indicates that ABL positively affects mathematical achievement, motivation, and attitudes toward learning. Studies have shown that students engaged in ABL consistently outperform peers taught through traditional methods and demonstrate enhanced creative problem-solving skills and mathematical literacy (Firdaus & Herman, 2017; Noreen & Rana, 2019). Additionally, ABL reduces math anxiety, fostering intrinsic motivation and a growth mindset among students (Sharma & Dharamveer, 2020). Its inclusive framework also helps

mitigate gender disparities in math performance by providing equal engagement opportunities for all students.

The study evaluates ABL's effectiveness in enhancing students' mathematical competencies and reducing performance gaps in Churchandpur District. The findings may inform future reforms to improve pedagogical practices in primary mathematics education, ultimately promoting higher levels of student achievement within the district and across the state.

Review of Literature:

The research on the impact of ABL on primary students' mathematics achievement is grounded in a robust body of literature that supports the use of this pedagogical approach. The effectiveness of ABL is supported by a range of studies that highlight its positive impact on various aspects of learning.

Early research in mathematics education emphasized the importance of student-centred, hands-on approaches to learning. This shift was influenced by *Piaget's (1964)* constructivist theory, which posits that students learn best by interacting with their environment and actively constructing their knowledge. In mathematics, this approach enables students to connect abstract concepts with concrete experiences by manipulating materials, fostering a more profound comprehension of mathematical principles (Festus, 2013; Harfield et al., 2007).

Numerous studies show that ABL significantly enhances students' mathematical skills. Research by Spitzer and Associates (1996) and Yadav (2015) reports that students in ABL classrooms consistently outperform their peers in traditional lecture-based environments on mathematical assessments (Spitzer & Associates, 1996; Yadav, 2015). These findings are attributed to ABL strategies such as guided exploration, hands-on activities, and collaborative group study, all of which enhance critical thinking, problem-solving, and teamwork skills (Paulin & Mugiraneza, 2023; Vansdadiya et al., 2023).

Moreover, ABL fosters creativity and boosts mathematical literacy through real-world problem-solving activities (Firdaus & Herman, 2017; NWOKE, 2021). The Problem-Based Learning (PBL) model enhances self-efficacy and alleviates math anxiety, cultivating a positive attitude toward mathematics and encouraging intrinsic motivation (Masitoh & Fitriyani, 2018). Recent studies also highlight ABL's potential to promote equity, particularly in addressing gender disparities in performance by creating inclusive learning environments (Nath & Manaklana, 2021; Saha & Banerjee, 2018).

The successful implementation of ABL relies on careful planning and execution, with educators playing a vital role in facilitating exploration and providing constructive feedback (Sharma & Dharamveer, 2020). Professional development for teachers is essential to maximize ABL's effectiveness. While the literature consistently supports ABL's role in enhancing mathematical achievement and fostering a positive learning atmosphere, further research is needed to examine its long-term effects, adaptability for diverse learning needs, and integration of ABL with traditional instructional methods to ensure its efficacy across educational contexts.

The Rationale of the Study:

Several key points drive the study:

1. Declining Performance in Mathematics: There has been a notable drop in mathematics achievement among Class V students in Churchandpur District, Manipur, India, as shown by the National Achievement Survey (NAS) data from 2017 to 2021. This trend indicates a pressing need for effective teaching interventions.
2. Traditional Teaching Limitations: Conventional teaching methods, often reliant on rote learning and passive student participation, have been linked to reduced student performance and interest in mathematics. These methods do not effectively promote engagement with mathematical concepts or develop critical problem-solving skills.
3. Benefits of Activity-Based Learning (ABL): ABL presents a viable alternative to traditional methods by fostering active participation, providing hands-on experiences, and linking mathematical concepts to real-world applications. This approach aligns with constructivist principles, allowing students to build knowledge through experiential learning.
4. Targeted Learning Gaps: The study focuses on two challenging competency areas highlighted in the NAS data: Number System and Operations and Geometry. It aims to assess ABL's effectiveness in enhancing students' comprehension of these topics.
5. Gender Equity Considerations*:* Traditional methods may exacerbate math anxiety and negative perceptions, particularly among girls. ABL's engaging and practical approach could make mathematics more accessible and enjoyable, potentially reducing gender disparities in achievement.
6. Enhancing Educational Practices: The research provides insights to improve mathematics education in Churchandpur District, aiding educators and policymakers in refining teaching practices, curriculum design, and teacher training initiatives.

Overall, the study emphasizes the urgent need for improved mathematics education through innovative teaching methods, exploring ABL's impact on students' understanding and aiming to foster equitable learning outcomes.

Objectives of the Study:

These objectives are as follows:

1. To examine the disparity in mathematics achievement in Competency 1 (Number System and Operations), comparing pretest and posttest results.
2. To assess the disparity in mathematics achievement in Competency 2 (Geometry), comparing pretest and posttest results.
3. To identify disparities in mathematics achievement across overall competencies in the pretest.
4. To investigate disparities in overall mathematics achievement between boys and girls in the posttest.
5. To analyse the impact of the intervention on overall mathematics achievement by comparing pretest and posttest results.

Hypothesis:

- **Hypothesis 1:** There is no significant difference in mathematics achievement in Competency 1 from pretest to posttest.
- **Hypothesis 2:** There is no significant difference in mathematics achievement in Competency 2 from pretest to posttest.
- **Hypothesis 3:** There is no significant disparity in mathematics achievement between boys and girls across competencies in the pretest.
- **Hypothesis 4:** There is no significant difference in overall achievement between boys and girls in the posttest.
- **Hypothesis 5:** There is no significant impact on overall mathematics achievement from pretest to posttest.

Statement of the Problem:

The present study's problem is **"Enhancing Mathematical Proficiency in Primary Students Through Activity-Based Learning: A Study in Churchandpur District, Manipur."**

Methodology:

The study employed an action research approach with a pretest-posttest design to assess the impact of activity-based learning (ABL) on student outcomes. This methodology involves a cyclical process of planning, acting, observing, and reflecting, enabling researchers to address practical problems in educational settings. The research was conducted at a government high school in Churchandpur District, Manipur.

Sample and Population

The population for this study was all primary students enrolled in class V in Tuibong High School, a government high school located in Churchandpur District, Manipur. A sample of 72 students was collected using purposive sampling to ensure the participation of a cooperative and engaged group of students. The sample was evenly divided between boys (38) and girls (34), comprising equal representation of genders.

Tools and Techniques

To evaluate the impact of the Activity-Based Learning (ABL) intervention, the researchers employed several data collection and analysis methods:

1. Mathematics Achievement Questionnaire: A competency-based, 30-item multiple-choice questionnaire was administered as both a pretest and posttest to measure students' mathematical proficiency in the key areas of Number System and Operations and Geometry. This questionnaire was aligned with the National Achievement Survey (NAS) model by the National Council of Educational Research and Training (NCERT) in India, consisting of 15 items per area. The order of questions was altered in both the pretest and posttest to control for instrument variability.
2. Open-Ended Student Questionnaires: Qualitative data were gathered through a 20-item open-ended questionnaire to capture students' perceptions and experiences of the ABL intervention. It included questions about their interest, enjoyment, participation, and overall learning during the activity-based lessons.
3. Teacher Observations: The researchers conducted observations of student behaviour and engagement during ABL lessons, taking notes on participation levels, interaction, motivation, and any challenges faced.

These tools and techniques provided a comprehensive approach to assessing the effectiveness of the ABL intervention on students' mathematical learning.

Procedure of Data Collection and Analysis

The data collection procedure included three key steps:

I. **Pretest Administration:** The mathematics achievement questionnaire was administered on 10th November 2022 to all participants before the intervention.

II. **Intervention Implementation:** The four-week ABL intervention was implemented, replacing regular math instruction.

III. **Posttest Administration:** After the intervention, the same mathematics achievement questionnaire was administered on 13th December 2022 by reshuffling the items as a posttest.

Both quantitative and qualitative data were analysed:

- **Quantitative Analysis:** Paired samples t-tests were used to compare the mean scores between the pretest and posttest for each competency area and the overall questionnaire.
- **Qualitative Analysis:** Emergent coding was used to identify and categorize key themes in the qualitative data.

This mixed-methods approach gave a more comprehensive understanding of the intervention's effectiveness.

Analysis and Interpretation:

The analysis and interpretation of the results focus on evaluating the intervention's effectiveness with each of the study's five objectives. To provide a comprehensive overview of the findings, each objective is examined individually as follows:

Objective 1: ***Examining Disparity in Competency 1 Achievement***

The first objective was to investigate changes in mathematics achievement in Competency 1 (Number System and Operations) from pretest to posttest.

Table 1: Paired Sample Statistics for Competency 1

Pair 1		Mean	N	Std. Deviation	Std. Error Mean	Correlation	Sig.
Competency 1 (Pretest)		5.46	72	1.928	.227	.152	.202
Competency 1 (Posttest)		7.63	72	1.027	.121		

Table 1 indicates a significant improvement in Competency 1 achievement following the ABL intervention. The mean score for Competency 1 in the pretest was 5.46 (SD = 1.928). After the intervention, the mean score increased to 7.63 (SD = 1.027) in the posttest.

Table 2: Paired Samples Test for Competency 1

Pair 1	Paired Differences			t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
Competency 1 (Pretest) - Competency 1 (Posttest)	-2.167	2.042	.241	-9.004	71	.000

Table 2 indicates that a paired samples t-test mean difference between pretest and posttest mean for Competency 1 was -2.167, with a standard deviation of 2.042 and a standard error mean of 0.241. The t-statistic for this paired difference was -9.004, with 71 degrees of freedom, yielding a two-tailed significance (p-value) of 0.000. Since the p-value is less than 0.05, we reject the null hypothesis and conclude that there is a statistically significant difference between pretest and posttest scores for Competency 1. These findings suggest that the ABL intervention effectively enhanced students' understanding and skills related to the Number System and Operations.

Objective 2: Assessing Disparities in Competency 2 Achievement

The second objective was to assess changes in mathematics achievement in Competency 2 (Geometry) from pretest to posttest.

Table 3: Paired Sample Statistics for Competency 2

Pair 1	Mean	N	Std. Deviation	Std. Error Mean	Correlation	Sig.
Competency 1 (Pretest)	3.51	72	1.644	.194	.287	.014
Competency 1 (Posttest)	8.67	72	1.322	.156		

Table 3 shows that the mean score for Competency 2 increased considerably from 3.51 (SD = 1.644) in the pretest to 8.67 (SD = 1.322) in the posttest. However, a statistically significant, weak positive correlation existed between pretest and posttest scores (r = 0.287, p = 0.014).

Table 4: Paired Samples Test for Competency 2

Pair 1	Paired Differences			t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
Competency 2 (Pretest) - Competency 2 (Posttest)	-5.153	1.789	.211	-24.435	71	.000

Table 4 reveals that the paired difference mean was -5.153, with a standard deviation of 1.789 and a standard error mean of 0.211. The t-statistic for this difference was -24.435, with 71 degrees of freedom, and the two-tailed significance (p-value) was 0.000. Since the p-value is well below the 0.05 significance level, we reject the null hypothesis, concluding that there is a statistically significant difference between the pretest and posttest scores for Competency 2. The substantial increase in mean scores and the highly significant t-test results strongly indicate that the ABL intervention positively impacted students' understanding of Geometry concepts.

Objective 3: Identifying Initial Disparities in Overall Achievement

The third objective sought to determine if there was a significant disparity in overall mathematics achievement between boys and girls in the pretest.

Table 5: Group Statistics for Pretest Overall Achievement by Gender

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Overall Achievement (Pretest)	Girls	34	9.56	2.584	.443
	Boys	38	8.45	2.457	.399

The pretest results (**Table 5**) show a slight difference in mean scores between boys and girls. Girls (n = 34) had a mean score of 9.56 (SD = 2.584), while boys (n = 38) had a mean score of 8.45 (SD = 2.457). This difference in means suggests that girls initially performed slightly better than boys on average in overall mathematics competencies. The standard error of the mean was 0.443 for girls and 0.399 for boys, indicating similar levels of variability in scores across both groups.

Table 6: Independent Samples Test for Pretest Overall Achievement by Gender

Overall Achievement (Pretest)	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Equal variances assumed	.000	.991	1.870	70	.066	1.111	.594
Equal variances not assumed			1.865	68.187	.067	1.111	.596

Table 6 indicates that Levene's Test for Equality of Variances yielded an F-value of 0.000 with a significance value of 0.991, indicating that the variances between the two groups can be considered equal. Therefore, the t-test assuming equal variances is used to interpret the results.

The t-test for equality of means yielded a t-value of 1.870 with 70 degrees of freedom and a two-tailed significance (p-value) of 0.066. We fail to reject the null hypothesis since the p-value is slightly above the 0.05 threshold. It indicates that the observed difference in pretest scores between boys and girls is not statistically significant at the 5% level. The difference was not statistically significant, although girls demonstrated slightly higher mean scores than boys in overall mathematics achievement during the pretest. This result suggests that, at the baseline, there was no substantial disparity in mathematics competencies between boys and girls, indicating a relatively equal starting point in overall achievement across genders before the intervention.

Objective 4: Investigating Disparities in Overall Achievement After ABL

The fourth objective was to investigate if there were any disparities in overall mathematics achievement between boys and girls after the implementation of the ABL intervention.

Table 7: Group Statistics for Posttest Overall Achievement by Gender

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Overall Achievement (Posttest)	Girls	34	16.32	1.701	.292
	Boys	38	16.26	1.826	.296

Table 7 shows that in the posttest results, girls (n = 34) achieved a mean score of 16.32 with a standard deviation of 1.701, while boys (n = 38) had a nearly identical mean score of 16.26 with a slightly higher standard deviation of 1.826. The standard errors for the mean were similar, at 0.292 for girls and 0.296 for boys, indicating comparable consistency in performance within each group. These mean scores show minimal difference, suggesting that both groups performed at nearly the same level in the overall mathematics achievement in the posttest.

Table 8: Independent Samples Test for Posttest Overall Achievement by Gender

Overall Achievement (Posttest)	**Levene's Test for Equality of Variances**		**t-test for Equality of Means**				
	F	**Sig.**	**t**	**df**	**Sig. (2-tailed)**	**Mean Difference**	**Std. Error Difference**
Equal variances assumed	.517	.475	.145	70	.885	.060	.417
Equal variances not assumed			.145	69.879	.885	.060	.416

The Levene's Test for Equality of Variances with an F-value of 0.517 and a significance level of 0.475 in **Table 8** indicated no significant variances in the two groups—boys and girls. This result confirmed the assumption of equal variances for the subsequent t-test. The t-test for equality of means yielded a t-value of 0.145 with 70 degrees of freedom and a two-tailed p-value of 0.885. Since this p-value is well above the 0.05 threshold, the null hypothesis was accepted, suggesting that the difference in mean scores between boys and girls in the posttest was not statistically significant. These findings imply that the ABL intervention fostered equitable improvements in mathematics achievement for both genders, resulting in boys and girls achieving comparable levels of mathematical competency by the end of the intervention.

Objective 5: Analyzing the Overall Impact of the ABL Intervention

The final objective of the study was to analyse the impact of the ABL intervention on overall mathematics achievement by comparing pretest and posttest results.

Table 9: Paired Sample Statistics for Overall Achievement

Pair 1	Mean	N	Std. Deviation	Std. Error Mean	Correlation	Sign.
Overall Achievement (Pretest)	8.97	72	2.562	.302	.187	.0117
Overall Achievement (Posttest)	16.29	72	1.756	.207		

Table 9 shows a substantial increase in the overall mean score for the 72 participants from 8.97 (SD = 2.562) in the pretest to 16.29 (SD = 1.756) in the posttest. The paired samples correlation between pretest and posttest scores is 0.187 with a significance level of 0.117, showing a weak, non-significant positive correlation. This weak correlation implies that students' posttest scores were not strongly dependent on their pretest scores, suggesting that the improvement may be attributed mainly to the intervention rather than initial competencies. This substantial increase in the mean score suggests an overall improvement in mathematics achievement following the intervention. The reduction in standard deviation from pretest to posttest indicates a more consistent performance among students after the intervention, highlighting the intervention's role in raising average scores and narrowing achievement variability.

Table 10: Paired Samples Test for Overall Achievement

Pair 1	Paired Differences			t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
Overall Achievement (Pretest) - Overall Achievement (Posttest)	-7.319	2.823	.333	-22.004	71	.000

Table 10 reveals a paired samples t-test comparing pretest and posttest mean scores. The mean difference was -7.319, with a standard deviation of 2.823 and a standard error of 0.333. It yielded a t-statistic of -22.004 with 71 degrees of freedom and a two-tailed p-value of 0.000. Since the p-value is well below 0.05, we reject the null hypothesis, confirming that the intervention had a statistically significant impact on students' mathematics achievement. The

increase in mean scores and the t-test results highlight the intervention's positive effect on students' math competencies.

Although there was a weak, non-significant positive correlation between pretest and posttest scores ($r = 0.187$, $p = 0.117$), the significant increase in mean scores and the strong t-test results indicate that the ABL intervention was instrumental in improving students' overall math skills.

Discussion:

The study's findings provide strong evidence for the effectiveness of Activity-Based Learning (ABL) in enhancing mathematics achievement among primary school students. ABL led to significant improvements in student performance in key areas, including Competency 1 (Number System and Operations) and Competency 2 (Geometry), as reflected in marked increases in mean scores and statistically significant results from t-tests. Notably, the intervention promoted equitable outcomes, effectively minimizing the initial gender gap in mathematics achievement observed in the pretest. The overall enhancement in mathematics scores from pretest to posttest underscores the positive impact of the ABL approach.

These results have important implications for mathematics education, highlighting ABL's potential as a robust pedagogical strategy that utilizes hands-on activities, collaborative learning, and real-world applications to deepen mathematical understanding and foster inclusive learning environments. The study demonstrates ABL's efficacy in improving the mathematical performance of primary school students in the Churchandpur District of Manipur, India. Following the ABL intervention, students showed significant advancements in essential domains, further corroborated by existing research advocating for experiential learning to enhance mathematical comprehension. Notably, studies by Harfield et al. (2007) and Spitzer & Associates (1996) affirm the success of ABL in boosting student performance on standardized assessments, while Firdaus et al. (2017) and Noreen & Rana (2019) emphasize its effectiveness in strengthening fundamental mathematical skills through problem-based learning.

A critical aspect of this study was its focus on gender equity in mathematical achievement. Although pretest scores indicated a slight bias favouring girls, the ABL intervention significantly reduced this gap, resulting in nearly equal posttest scores across genders. It aligns with research by Nath and Manaklana (2021) and Sharma and Dharamveer (2020), highlighting ABL's ability to alleviate math anxiety and promote positive attitudes, particularly

among female students. The approach's emphasis on real-world applications and relatable concepts, supported by recent findings from Vansdadiya et al. (2023) and Paulin & Mugiraneza (2023), reinforces its inclusivity. Ultimately, these findings suggest that integrating ABL into the curriculum and comprehensive teacher training could aid policymakers in enhancing primary mathematics education and reversing trends of declining performance. Future research could explore ABL's long-term effects and adaptability across educational contexts.

Conclusion and Recommendations:

The present study's findings provide strong evidence for the effectiveness of Activity-Based Learning (ABL) in enhancing mathematical proficiency among primary school students. Significant improvements in posttest scores for both Competency 1 and 2 indicate that the ABL intervention promoted a deeper understanding and engagement with mathematical concepts. The focus on real-world applications, hands-on activities, and collaborative learning is supported by extensive research on the advantages of experiential learning in mathematics.

Notably, the ABL intervention also led to more equitable outcomes by reducing the gender gap in mathematics achievement. Although girls initially outperformed boys on the pretest, both genders achieved nearly identical mean scores on the posttest, highlighting ABL's potential to create a more inclusive learning environment. This finding is consistent with prior research suggesting that ABL can alleviate gender-based performance disparities by reducing math anxiety, fostering positive attitudes toward mathematics, and encouraging equal participation among students.

To fully harness the benefits of Activity-Based Learning (ABL), the study offers several key recommendations for educators and policymakers:

1. Integrating ABL into Curricula*:* ABL methods should be formally incorporated into primary school mathematics curricula to ensure systematic and consistent implementation. Schools can create dedicated modules prioritizing ABL approaches, enhancing students' understanding and retention of mathematical concepts.
2. Providing Professional Development: Comprehensive professional development is essential for teachers to implement ABL effectively. Training programs, including workshops and mentorship, should focus on ABL techniques, active learning classroom management, and strategies for facilitating group work and discussions.

3. Allocating Resources: Successful ABL implementation relies on access to educational resources such as manipulatives, games, and technology that support hands-on exploration. Schools should prioritize providing age-appropriate materials that make mathematics tangible and engaging.
4. Diverse Assessment Techniques: Assessment practices should extend beyond standardized tests to include observational assessments, formative evaluations, and self-reflective activities that capture students' conceptual understanding and application skills. Implementing portfolio or project-based assessment can provide a holistic view of student progress.
5. Fostering Inclusive and Gender-Sensitive Practices: Educators should strive to create inclusive classrooms where activities are accessible and engaging for all students. Promoting a positive learning environment, reducing stereotypes, and encouraging participation from underrepresented groups can lead to equitable learning outcomes.
6. Conducting Longitudinal Studies: Future research should investigate the long-term effects of ABL on mathematical proficiency, retention, and real-world application. Assessing ABL's efficacy across diverse educational contexts and student demographics is also recommended.
7. Encouraging Family and Community Involvement: Schools should involve parents and communities in reinforcing ABL principles through workshops, interactive homework, and community math nights, fostering a collaborative learning ecosystem.

By implementing these recommendations, educators and policymakers can enhance primary school students' mathematics learning experience, leveraging ABL's transformative potential to equip students with essential skills and confidence for future success.

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Authors Profile

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debates, national camps, and scouting, where he is a certified Advanced Cub Master and Scout Master. His contributions highlight his dedication to advancing education through research, teaching, and extracurricular involvement.