'Explore It' Tasks: The Impact of Student-Led Inquiry on Engagement and Enjoyment in Primary Maths

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INTRODUCTION

BACKGROUND

The Year 5 team have been exploring approaches that promote deeper engagement and greater enjoyment in Maths. Traditional lesson structures often rely heavily on teacher modelling followed by practise. However, a growing emphasis on pupil-led learning encouraged the trial of "Explore It" tasks, where children tackle the concept independently or collaboratively before any direct input is given. This action research project investigates whether these tasks increase student engagement and enjoyment in Year 5 Maths lessons.

The rationale behind the use of 'Explore It' tasks sits in educational theory, which suggests that autonomy and inquiry can increase intrinsic motivation and deepen conceptual understanding (Ryan & Deci, 2000; Hattie, 2009). The EEF (2021) highlights the value of metacognitive approaches and student-led learning, particularly in Maths. 'Explore It' tasks are designed to promote independence, critical thinking and discussion, offering a shift away from teacher-led instruction.

RESEARCH QUESTIONS

- How does the use of "Explore It" tasks in Maths impact student engagement?
- Do students report greater enjoyment of lessons when "Explore It" tasks are used?
- Is there a correlation between ability level and preference for lesson type?

RESEARCH

RESEARCH ACTION

The need to develop more student-led learning and challenge from the offset was identified in the School Improvement Plan and KHDA feedback. Following this, the 'Explore It' structure was trialed in Year 5 Maths lessons as a way of improving student autonomy and inquiry skills once per week, focusing on lessons where children could apply existing learning to tackle new concepts. The weekly 'Explore It' lessons were used consistently throughout terms 2 and 3 until survey data was collected.

METHODOLOGY

Participants in this research included 116 students across five Year 5 classes.

The methodology of this research incorporated both quantitative and qualitative data, with an anonymous online survey for students to complete with both quantitative (Likert scale) and qualitative (open-ended) items. The data collected included enjoyment ratings, preferred lesson style, perceived understanding, focus and qualitative feedback about their feelings towards 'Explore It' style lessons.

The data was then analysed by evaluating the survey responses and identifying patterns and trends. Additionally, students self-reported which levels of challenge they usually access and this was used to cross-tabulate their lesson preferences to identify any correlation between ability level and preferred lesson type.

RESULTS

- The majority of students (72.4%) rated their enjoyment of Maths as 4 or 5 out of 5.
- Whilst the results were varied, with the majority of students (47.8%) liking both 'Explore It' lessons and Traditional lessons equally, more students (30.2%) stated a preference for 'Explore It' lessons, than traditional lessons (19.8%) .
- Students reported feeling more confident during 'Explore It' tasks.
- Children cited the variety, autonomy, and opportunity to challenge themselves as reasons for enjoyment.
- There was no significant difference in lesson preference between more able and less able students.
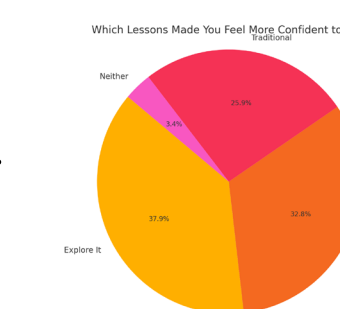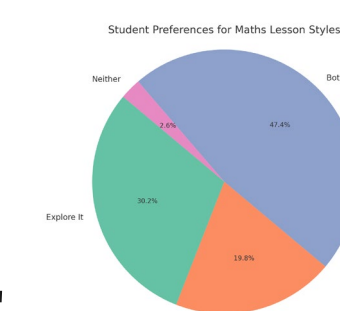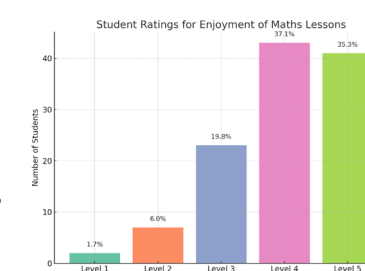
ANALYSIS

Survey responses indicate that 'Explore It' tasks were a preferred lesson style, with a large proportion of students also expressing equal enjoyment of both 'Explore It' and traditional lessons. Enjoyment of Maths was generally high, with most students rating their experience positively.
The data shows no significant variation in preference based on ability, suggesting that 'Explore It' tasks engage both more and less able learners equally well. Students also associated these tasks with increased confidence to try their learning independently, as reflected in their lesson-style responses.
Qualitative comments indicate that pupils value the autonomy and choice 'Explore It' tasks provide but would benefit from clearer expectations and scaffolding.

CONCLUSION

DISCUSSION

The findings suggest that 'Explore It' tasks are a highly engaging and inclusive teaching strategy. The lack of difference in preference across ability levels indicates that learners of all abilities can access and benefit from this approach.
Students clearly value opportunities for independence, challenge and choice, as reflected in both quantitative and qualitative feedback. While some found the format overwhelming or unclear, these concerns were largely about implementation, not the concept.
To maximise impact, 'Explore It' tasks should be supported by clear instructions and flexible scaffolding. When well-delivered, they appear to promote focus, confidence, and enjoyment and may enhance pupils' ownership of learning in Maths.
To summarise, 'Explore It' tasks positively impact student engagement and enjoyment in Maths, regardless of ability. Although some learners still prefer structured input, the majority found 'Explore It' tasks motivating and confidence-boosting. These findings support the continued use and refinement of pupil-led learning approaches in Maths.

REFLECTIONS

This project has reaffirmed the value of designing learning experiences that empower students to think critically and independently. Moving forward, incorporating 'Explore It' tasks with structured scaffolds could help all learners thrive. It has also reinforced the idea that pupil-led inquiry in Maths not only builds confidence but can make learning more meaningful and engaging. Expanding this approach whole-school could support a more consistent culture of independence and have a significant impact on pupil attitudes and outcomes.

REFERENCES

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