St. Joseph's Rush

NCSE Practice-Based Research Programme 2025/26
School Research Summary

St. Joseph's Secondary School in Rush is a mixed DEIS school of about 950 students and almost 100 members of staff. I have been working as a Mathematics and Spanish teacher for 15 years, this is my fifth year in St. Joseph's. I was seconded to the PDST from 2018 - 2022 and was in the privileged position to engage with research and work with Maths teachers nationwide.

This research took place as we were involved with the TCD IMPACT Programme. This is a professional development initiative for second-level teachers of mathematics in Ireland. It supports teachers to plan and implement units of learning that use engaging teaching approaches, helping students to understand and enjoy mathematics. Teachers can work towards an IMPACT badge, and schools with strong teacher participation in the badge can earn a school-level IMPACT flag.

School and project details

Name of school: St. Joseph's Rush

Practicing teacher leads: Arlene Murphy / Shamsa Shahid

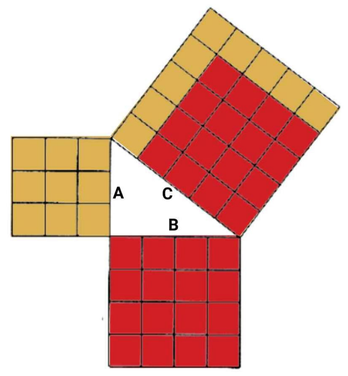
Research theme: To examine the Impact of IMPACT: how the TCD Innovative Maths Pedagogy And Creative Teaching (IMPACT) process has changed engagement and access to mathematics in our context.

Research aim: The aim of this research was to examine the impact of Unit of Learning (UoL) on Teaching and Learning in Maths. A Unit of Learning is where we choose a topic, link it with its learning outcomes in the syllabus and decide on a pathway of teaching and learning activities so that students complete the learning outcomes. A Unit of Learning should link learning outcomes, topics in mathematics and understanding across the curriculum.

Research findings

Although we found no significant impact on student attitudes pre and post intervention survey, student written reflections on UoL were very positive.

Students reported that they enjoyed the variety of tasks used; we observed that they were engaged in the group work throughout; they experienced active learning methodologies, rich tasks, open discussion and discovery of geometric theorems.



From the teachers point of view, we enjoyed the collaborative aspect of the design; observed the consistent engagement of students throughout the variety of activities; and completed the teaching of multiple topics in a short space of time, creating links and (hopefully) a deep conceptual understanding of the links between axioms, theorems and constructions.

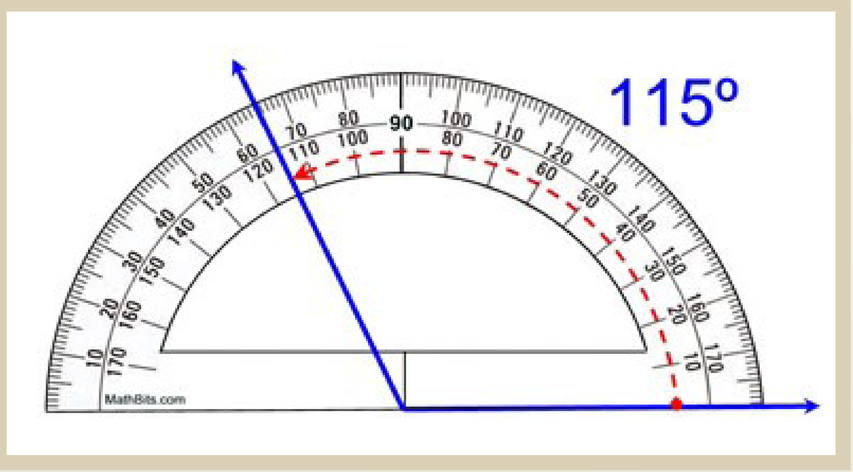
Research in practice

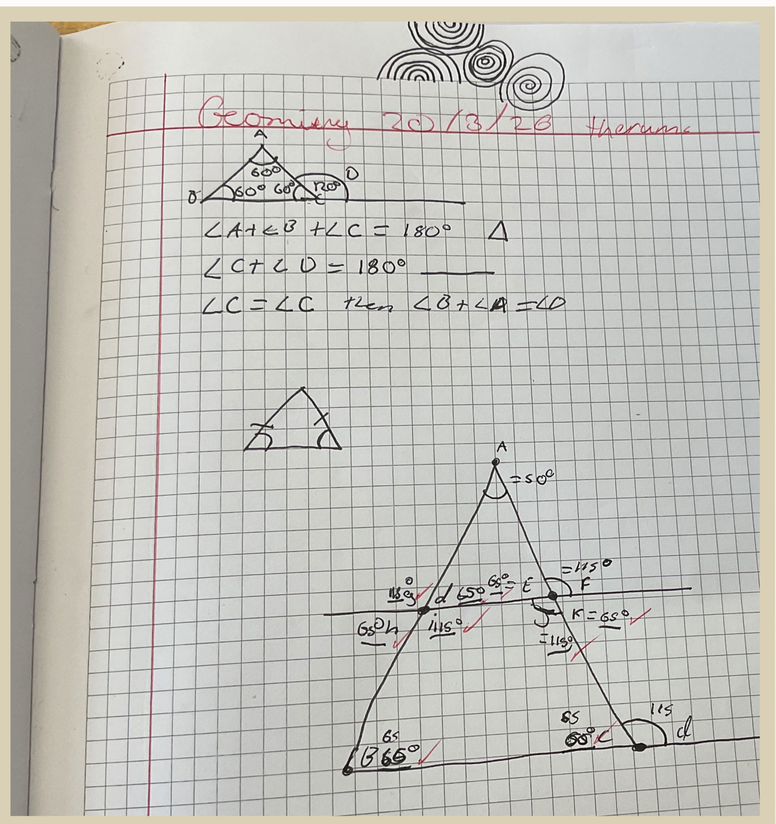
Methods

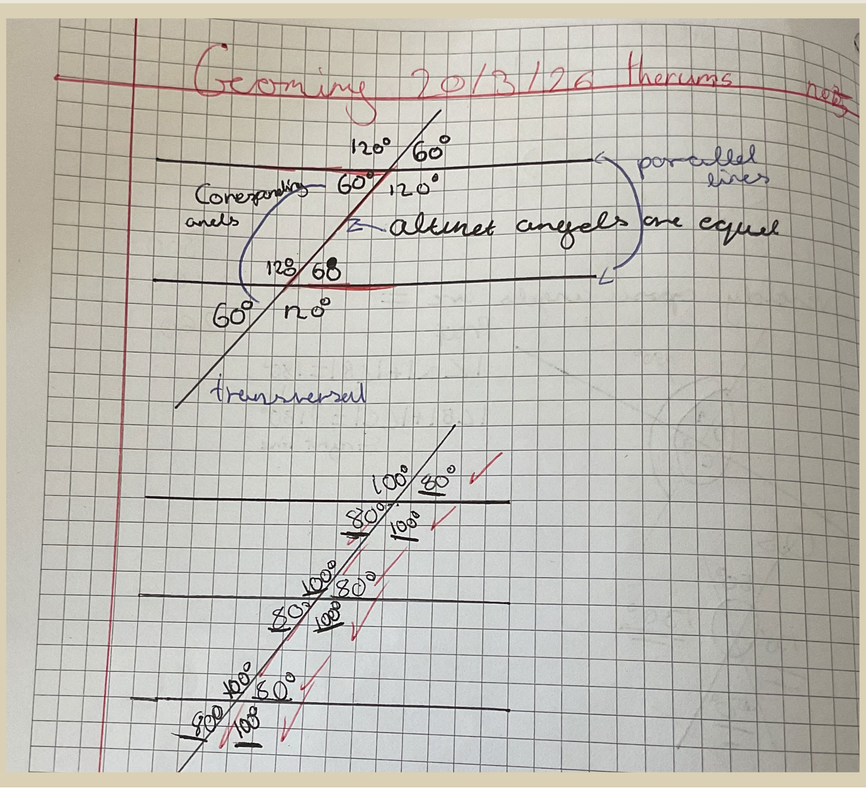
The methods included qualitative research methods, pre and post intervention attitudinal surveys; observation; and post intervention reflection.

Participants

There were 22 students and 2 teachers involved.







Impact of our research

The collaborative framework we established has shifted our daily practice from isolated teaching to a direct team-teaching mindset that has increased teacher collaboration.

The research allowed us reflect on our research practices. Specifically, this research forced us to critically evaluate our **formative assessment practices.** By moving away from purely summative tests to analyse student progress through exit tickets and observations, we gained a much more nuanced understanding of student understanding.

- **At the class level**
  Students became more autonomous learners, realising that their feedback directly shaped the next day's lesson.
- **At the school level**
  When teachers engage in structured, collaborative reflection, it breaks down classroom isolation, fosters a culture of Professional Learning Communities (PLCs) in line with *Looking at Our School (LAOS)* guidelines, and ensures that pedagogical changes are driven by data and student voice rather than guesswork.

Challenges to using this approach going forward is the lack of adequate planning time. We do not have the planning hours required to create units of learning for each topic; to collaborate on a deep level about teaching methodologies; or to create detailed lesson plans that could be used with different year groups, or different classes. Despite this challenge, teachers are constantly engaging in action research, CPD courses and other programmes that will allow them to develop their personal teaching skills.

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Coláiste na Tríonóide, Baile Átha Cliath
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