Coláiste Chiaráin

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

Coláiste Chiaráin is a secondary, co-educational, inter-denominational community school in Leixlip, Co. Kildare, with approximately 676 students and 48 teachers. The school has six SNA posts, three special classes for autistic students and 172.5 hours of Special Education Teacher (SET) provision per week.

The school ethos is centred on inclusion, respect, equality and supporting the holistic development of every student. There is a strong emphasis on creating a welcoming school community in which students of all backgrounds and abilities are supported to participate fully in school life. This inclusive ethos provided the context for this practice-based research into differentiation and the Jigsaw Model.

School and project details

Name of school: Coláiste Chiaráin, Leixlip

Practicing teacher lead: Jennifer McManus

Research theme: Differentiation, Universal Design for Learning (UDL) and Inclusive Practice

Research aim:

The aim of this research was to develop and evaluate the Jigsaw Model, an original teaching approach that I developed and refined through ongoing classroom practice and feedback from students and colleagues. I wanted the research to explore whether the Jigsaw Model could provide a practical, sustainable and inclusive approach to differentiation that increases student confidence, promotes collaboration and supports all learners to engage successfully with the same learning intentions.

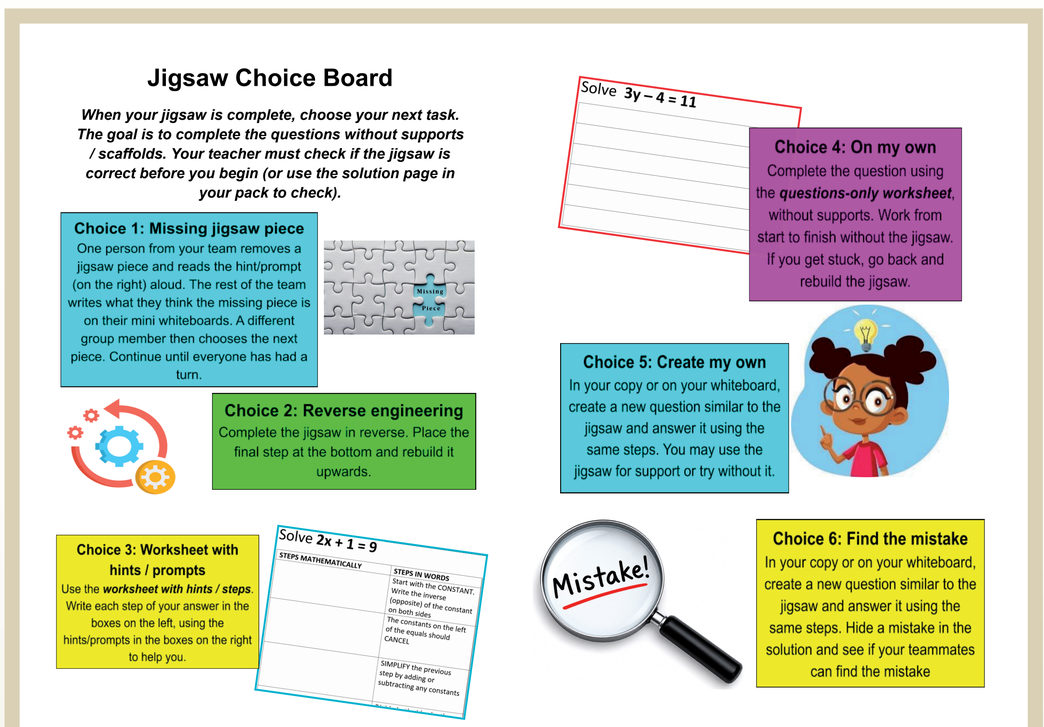
Research in practice

Methods

The research adopted a practice-based, iterative approach. This included an initial staff survey exploring existing approaches to differentiation and team teaching, teacher workshops, student questionnaires and ongoing observations and reflective notes throughout the project.

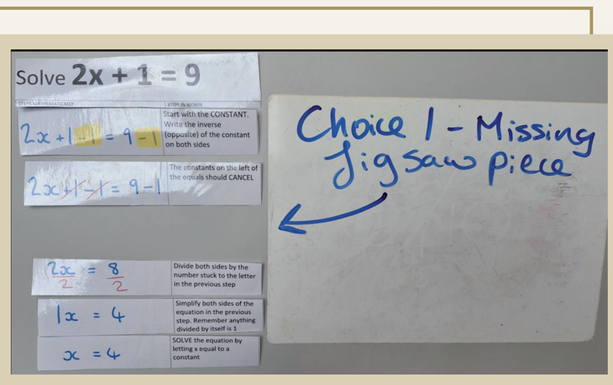
Participants

There were 68 participants involved which included 42 teachers and 26 students.



Research findings

The research suggests that the Jigsaw Model has considerable potential as an inclusive teaching strategy and, most notably, as a way of reducing the *"blank page"* barrier experienced by many students when approaching complex tasks.



Our top three findings

1. **The Jigsaw Model helps reduce the *"blank page"* barrier**

   The most consistent finding across both classroom observations and student feedback was that breaking questions into manageable sequential steps gave students a clear starting point and increased their confidence to engage with the task. Rather than feeling overwhelmed by a blank page, students were able to focus on one step at a time before gradually working towards completing the question independently.

   Student responses repeatedly referred to knowing how to begin and understanding what to write next. One student commented that the activity helped with:

   "Knowing how to start the question and progressing through the question piece by piece."

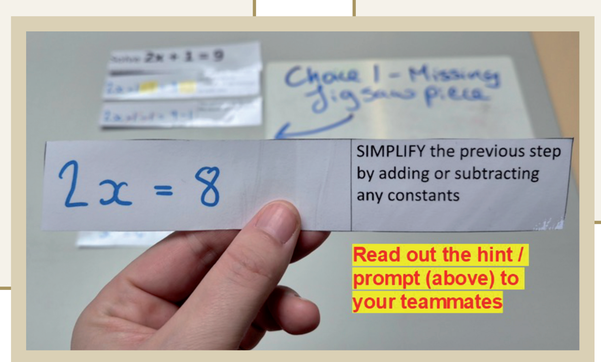
   Another reflected: *"It makes you feel confident because you know exactly what to do."*

2. **Meaningful scaffolding and student dialogue can support inclusive practice without lowering expectations**

   The research highlighted the value of structured scaffolding combined with collaborative learning. Students learned through discussion, questioning and shared problem-solving, while teachers could facilitate learning by listening to conversations and providing targeted support when needed. Staff identified particular benefits for mixed-ability classrooms, student confidence, engagement and inclusive practice, while maintaining the same learning intentions for all students.

3. **Effective differentiation should be flexible, sustainable and adaptable across subjects**

   One of the most significant reflections arising from the research was that there is no single Choice Board suitable for every subject area. Practical suggestions from both staff and students led to improvements in resource design, Choice Board activities and classroom implementation. The research also highlighted the potential of AI to support sustainable differentiation. Once an effective prompt had been developed, teachers were able to create and adapt subject-specific jigsaw activities quickly, reducing preparation time while preserving the core principles of the model.



Impact of our research

The research has already led to significant refinement of both the Jigsaw Model and its associated Choice Board activities. Feedback from staff and students informed practical improvements to resource design, the development of new collaborative and retrieval-based activities, and greater flexibility in how the model can be adapted across different subject areas.

Practical improvements arising directly from staff and student feedback include:

- clearer labelling of *"Model Answer"* and *"Hint"* on jigsaw pieces;
- consideration of scaffolded worksheets alternating between model answers and hints;
- development of competitive retrieval-based activities suggested by students;
- reflection on the suitability of the model for different subject areas and question types;
- recognition that Choice Board activities should remain flexible rather than standardised.

An important finding was that there is no single Choice Board suitable for every subject. While the Jigsaw Model itself appears transferable across disciplines, the most effective follow-on activities are often subject-specific and should remain flexible rather than standardised.

Perhaps the most significant impact has been on my own classroom practice. Rather than viewing differentiation as creating multiple versions of the same lesson, I now see greater value in reducing barriers to learning through meaningful scaffolding, collaboration and opportunities for student choice while maintaining high expectations for all learners.

Conducting this research has deepened my understanding of inclusive practice and encouraged me to critically reflect on my own teaching. It has enabled me to develop and refine an original classroom approach through authentic feedback from colleagues and students, rather than relying on assumptions about its effectiveness.

The project has fostered professional discussion within the school, encouraged collaboration across subject areas and highlighted the potential of AI to make high-quality differentiated resource creation more practical and sustainable.

Perhaps most importantly, the research has transformed my own understanding of differentiation. I no longer see it as producing different work for different students, but as reducing barriers to learning through carefully designed scaffolds, purposeful student dialogue and meaningful opportunities for choice.

Rather than viewing the Jigsaw Model as a finished product, I now see it as an evolving framework that will continue to develop through classroom experience, collaboration and ongoing reflection.

I am now lecturing on the Graduate Diploma in Special and Inclusive Education with DCU about the jigsaw method and other inclusive methodologies. The focus for my lectures is inclusive numeracy.

DCU
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An Chomhairle Náisiúnta um Oideachas Speisialta
National Council for Special Education