NCSE PRACTICE-BASED RESEARCH PROGRAMME 2025/26

SCHOOL RESEARCH SUMMARY

School name: Castleknock Community College

Practising teacher lead: Grace Bermingham & Mary McDermott

Research theme: Leadership and Management – Implementing targeted Teacher Professional development for the inclusive classroom

Research aim:

We aim to use UDL strategies to help students to contextualise the content of a lesson and manage their own learning.

Methods

We drew from Research of Cognitive Load Theory and Richard E. Mayer's Principles to reduces cognitive load. We conducted two student surveys along with teacher observations of student engagement with UDL strategies used in our lessons.

The research included 120 students (90 students from 2nd year and 30 students from LC1) plus 2 teachers.

Research findings

When students were initially surveyed on their learning their responses were interesting. Too much information presented in lessons and students feeling tired were the most common reasons given for students finding it difficult to remember lesson content.

The greatest distraction to students by far at 40% was their own thoughts.

Students reported that visuals and pictures were one of their favourite and most useful strategies for remembering content. This was closely followed by practicing questions. This aligns with key educational theories such as Hattie's Visible Learning for Teachers that pictures and graphics are necessary for learning.

In our follow-up survey, after implementing our two designs, 74% of students wanted the keywords chart to be used throughout their lessons and not as a summery device at the end.

They identified it as a useful tool to improve teaching and learning.

Students asked for the 5Ts to be used from the start of lessons and expressed a desire for them on PowerPoints when activities are set by the teacher. Students also commented on time being important to them when doing tasks, and they felt knowing how long they had left when doing tasks was also helpful.

Top 3 findings

1.Improved Student Confidence

A key learning point was the importance of clarity and cognitive accessibility in the design of our lessons. The keyword chart functioned as both a linguistic scaffold and a confidence-building tool. Students who might typically struggle to articulate ideas were able to engage more actively with confidence because they had a visible bank of vocabulary. 66% of students agreed that a separate space for key words created a more positive and beneficial learning experience.

2.Improved Student Engagement

We observed that students sometimes looked back to these visuals, suggesting that they acted as anchors throughout the lesson. When tasks are supported visually and broken into clear, structured steps, students are more likely to remain engaged. This reflects the UDL emphasis on providing multiple means of engagement, as the graphics helped maintain motivation and clarity of purpose. 79% of the students who used the graphics and key words chart believed the charts were not a distraction in the lesson.

3.Enhanced Teacher Planning and Collaboration with Colleagues and Students

As teachers we frequently consider how to adapt supports for students to encourage greater independence, aligning with the UDL principle of developing expert learners who are strategic and self-regulated. Through our second survey we identified scope to encourage students to develop their own Keyword chart throughout lessons to provide greater autonomy over their learning. 74% of students felt the strategies used for this research would be of benefit to them in other subjects. By collaborating together as teachers and with our students we have established ways to improve these strategies going forward.

Impact of our research

Going forward the 5T visuals will be used more in PowerPoint presentation across all subjects we teach. It may not be of benefit to always use them all, but we will use them when they could be of benefit to any or all students.
We will use larger visuals for the new academic year as some students felt the current ones were too small.

The keywords chart was challenging in terms of the materials we used. Students found the strategy helpful for the most part, so it merits a permanent place on a whiteboard. To be more user friendly we will section the board with tape instead of using the separate laminated sheets we trialed for research purposes. Most students researched did not notice a difference with the colour used but some did so we will continue to use two distinct shades of green going forward.

Taking part in this research has clearly outlined for us the merits of supporting all students by making changes to how we provide opportunities for engagement and representation. Collaborating with colleagues throughout the process ensured we met deadlines and could adjust strategies as needed. Students appreciated the opportunity to provide feedback through the surveys and they valued having an input into methodologies and strategies used in their learning environment. This is an important process that we feel should continue.