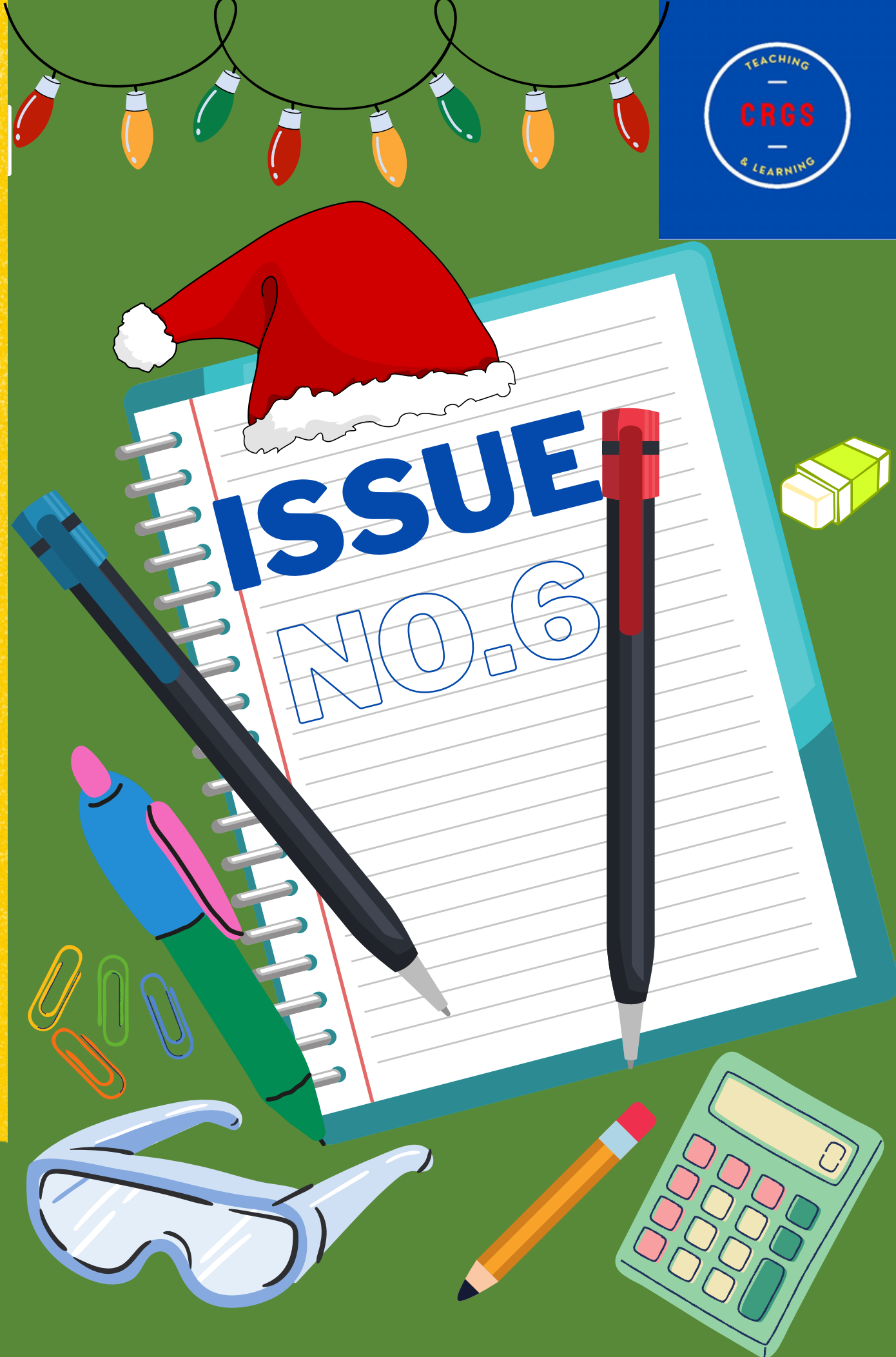


CRGS TEACHING AND LEARNING NEWSLETTER





Learning and Teaching is at the heart of our work at CRGS and is central to our ever developing school culture. The aim of this Learning and Teaching newsletter is to share ideas and prompt discussion as we continue to grow as a whole school, learn from one another and promote best practice.

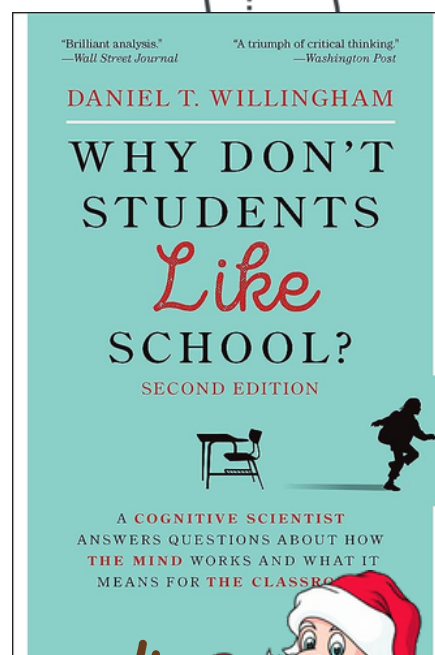
The newsletter is at times light hearted, at others serious, with some content proving contentious and other simply current learning and teaching fact, backed by academic research.

PRACTICE AND RETRIEVAL

Welcome to the final edition of the Teaching and Learning Newsletter for 2023. This time out we are focussing on our Practice and Retrieval Cog. These ideas are heavily influenced by Rosenshine's Principles of Instruction and Willingham's ideas on fluency and drilling.

Willingham tends to be less well known than Rosenshine. He published a book in 2009 called "Why don't students like school?" Two of the chapters in the book address questions we have probably all asked from time to time: "Why do students forget everything I say?" and "Why is it so hard for students to understand abstract ideas?".

Through practice and retrieval students can improve their confidence and fluency in a wide range of knowledge and practical skills. Starting with closely supervised guided practice students can be assisted to become more independent over time. In order to be able to achieve this fluency storing and retrieving information held in the long-term memory is crucial. It is also crucial that the curriculum is well-planned to ensure that there are repeated opportunities that build on what students should already know and be able to do in ever more challenging situations.



SO WHAT CAN WE DO TO SUPPORT STUDENTS WITH THIS? BELOW ARE SOME TECHNIQUES YOU MIGHT ALREADY USE OR MIGHT LIKE TO CONSIDER:

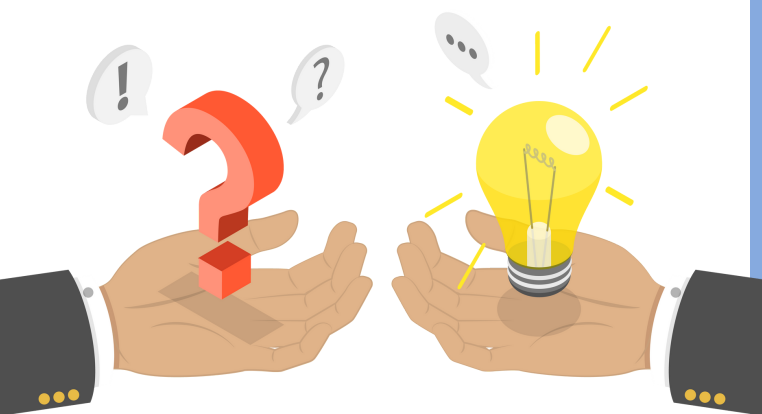
Quizzing

The process of being tested reinforces the retrieval of the information helping to store it in long-term memory. When well-planned into the curriculum spaced practice of knowledge can help students further to remember.

It is a good idea to give students advanced warning there will be a quiz on a certain topic so they can prepare. You can ask questions in many formats:

- Short answer
- Problem Solving
- Multiple Choice
- True/False or spot the error
- Labelling Diagrams/image recognition
- Recall of quotes/definitions

Make sure you give students enough time to answer and decide how you want students to mark their quizzes. Make sure you find out which questions cause any difficulties so these can be addressed.



Elaborative Interrogation

Get students to explore links and connections in the schemes of work by encouraging them to ask elaborate questions. Students can improve long-term retention if they ask elaborative questions to others or even themselves.

When setting this up students it will be necessary to model to students how to ask certain styles of questions and the different kinds of answers these questions can produce. Use stems like:

- How does? For processes
- Why did? For cause/effect, reasoning, rationale and motivation
- What happens if? For explorations of variables and their effects, predictions

Students can ask others their questions in pairs or you can even ask students to answer their own questions. Students can check their notes or get partner feedback to see how good their answers were. This technique can be a useful one prior to a test.

RETRIEVAL MAPPING AND COMPARE



This method is where you want students to recall on prior knowledge and their capacity to make links. Ask them to make a memory map of key concepts or you can be more specific and ask for certain areas within a topic.

Students then make a mind-map in a quick, memory-dump style before checking against a good resource- a teacher completed mind-map, checking against other students' knowledge, knowledge organisers, exercise book/notes in a folder, etc. They should explore what they did get right and what they missed out completely. It is a good tool for both teacher and student as it indicates what the students don't know while showing what they already have possessed in their long-term memory.

They help engage the student in making connections between different concepts and ideas, providing a deeper understanding of the material. Creating concept maps encourages students to think critically and form hypotheses when developing connections in their maps.

RECOMMENDED READS



SOME OTHER IDEAS TO TRY



SPEAK LIKE AN EXPERT

Students work with a partner and speak for up to two minutes on a previous learning topic. The other student listens for hesitation, repetition or the use of filler words and then gives feedback. The activity promotes retrieval practice and exercises speaking and listening skills. Key terminology cards can be created before the task to adapt to the needs of some students or can be created as a reflection task.

ANALYSING AND CONNECTING IMAGES

Display a picture that can be linked to a previous topic with a small number of questions. Design open ended questions to widen the range of retrieved knowledge. To stretch and challenge give two or more images. This high-order linking task encourages students to make connections between different topics and further develop their schema.

RETRIEVAL PRACTICE

When we teach something once, then want to do more to help students learn it better, instead of just reviewing the content, we're better off giving something like a quiz. In other words, if we do more asking students to pull concepts out of their brains, rather than continually trying to put concepts in, they will actually learn better.

Retrieval practice is **NOT THE SAME AS ASSESSMENT**. Although it can look like testing, it is a **learning strategy**, not a tool for measuring or grading students.

USING IT WELL

WHAT IT LOOKS LIKE

- Think-pair-share
- Low-stakes quizzes
- Flashcards
- Brain dumps

Include Feedback

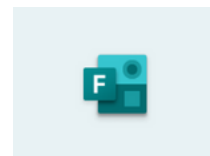
Tell students if they got the answer right or wrong.

Space Your Practice

Rather than doing retrieval all at once, spread practices out over time.

Match Practice to Assessment

If you will assess for basic recall of facts, retrieve with those. If you will require higher-order thinking on tests, include higher-order questions during retrieval.



USEFUL QUIZZING WEBSITES

Students greatly enjoy being quizzed in lessons using websites such as Quizlet, Blooket, Kahoot, Padlet, Microsoft Forms and Memrise. Incorporating these into lessons is a great way in which to engage students and encourage them to retrieve information.

[CLICK ON THE IMAGES BELOW TO FIND](#)

[OUT MORE ABOUT EACH WEBSITE](#)