LEARNER'S TOOLKIT STRATEGY

The Hill College Learner's Toolkit comprises cognitive and study strategies and routines supported by the cognitive sciences but translated into the secondary school student context. Many students rely on the low-utility (low learning gain for time invested) triad of cramming, re-reading, and rewriting notes. The reasons why students pick and stick with these strategies are because of

- perceived prior success,
- comfort,
- the appearance that they are 'doing' study or work,
- and panic or stress.

Even when presented with more efficient and effective techniques, students will revert to those that have worked for them in the past.

The Learner's Toolkit provides students with 6 high-utility alternatives that save time and deliver more significant learning gain.

The Leaner's Toolkit is incorporated in the education at Hill College, and through the careers and study skills program. Students are encouraged to use the Learner's Toolkit to enhance study and improve examination preparation.

STRATEGY #1 – Read It

Use the cognitive process of active reading

Active reading is the purposeful construction of meaning from text. Constructing meaning occurs by connecting the text and your existing knowledge/understanding. Using activity reading strategies, like Eagle and Wolf, aids one's ability to regulate their ability to read and interpret the text in an efficient and effective manner.

Eagle and Wolf
Fly over the text, hypothesise and connect your understanding; section into meaningful chunks; hunts for keyworks and phrases; look for patterns; and summarise whole understanding.

Cornell Notes
Divide your page into two columns; take free form notes in the right column as you read; following reading, create key points into the right column; use these points to write a summary at the bottom of the page.

Outlining note-taking
Create a subject matter heading; read the text noting key points; use them to create sub-headings; reread the text making sub-points under each sub-heading.

Applies to: All Subjects

STRATEGY #2 – Retrieve It

Forgetting is the number one enemy in learning

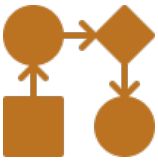
Retrieval is the top cognitive strategy that fights forgetting. Retrieve It uses the cognitive process of retrieval practice. Retrieval practice in the purposeful recall of learned information from one's long-term memory. It exploits the testing effect to connect new knowledge. This strengthens the speed at which we retrieve information and works against forgetting.

Quick Review
Consists of a question/problem from work covered yesterday, last week or a month ago.

Practice Test
Self-testing or taking practise tests under those settings (i.e. closed book, no notes, time limit) and environments that simulate test conditions.

Paired Quiz
Allowing students to quiz each other in pairs activates them as learning resources for another.

Applies to: All Subjects – but impactful in Mathematics, Science, and Languages



STRATEGY #3 – Space It

The purposeful distribution of study over a defined period

Space It uses the cognitive process of spaced practice. Spaced practice also helps you not fall into the trap of cramming. By spacing out your learning/study and doing little bits often, you often benefit from doing little bits. Also, you are preventing a significant drop in your understanding brought about by the Forgetting Curve.

Lucky Dip
Flick to five random pages from a text or exercise book that you have been studying. What are three details on each page that help you develop your understanding? Take notes to consolidate your thoughts.

Brain Map/Dump
Retrieval of everything you know about a topic of study that is written/drawn in a certain length of time. Like a test, create a visual map of your understanding to show linkages between concepts.

Spiral Back Summary
When you try to remember key definitions, details, facts and ideas of the current topic, write a 1-page summary of the topic.

Applies to: Mathematics, Languages, Science, Music, and Humanities

STRATEGY #4 – Jumble It

Interleaving

Changing the study order requires multiple processing strategies to see the links, similarities, and differences between concepts. Interleaving can scaffold the practice of cognitive thinking strategies or problem-solving processes.

Flash Cards
Engage 'active recall', which creates strong neuron connections by creating multiple memory-enhancing recall. The added benefit of feedback evokes self-reflection.

Retrieval Roulette
A simple Excel program that uses a list of questions and answers to generate a random quiz. You can set it to ask questions from any point in the course and questions from the current topic.

Online Quizzes
Many online quiz generators allow you to randomize the order of questions and the difficulty. Online quizzes also self-mark providing real-time feedback.

Applies to: All Subjects

STRATEGY #5 – Visualise It

Dual coding

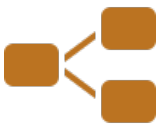
The dual coding theory suggests that there are visual and verbal intake channels in the brain. The simultaneous use of the verbal and visual channels in the brain supports the absorption of more informing while reducing the impact of cognitive load.

Brain Maps/Dumps
The retrieval of everything you know about a topic of study organized into a visual schema. Similar to a test, it creates a visual map of your understanding to show linkages between concepts.

Graphic Organisers
Organise your ideas, thoughts, and notes. Different visual structures support particular genres and visual displays of information. The effort and time to re-visit the information are decreased.

SketchNotes
Combines traditional handwritten notes with drawings, symbols, and other visual elements. The resulting map of ideas, with clear visual cues, reduces the effort and time to revisit the information.

Applies to: English, Humanities, Mathematics, Sciences, and The Arts



STRATEGY #6 – Connect It

Elaborative Interrogation is key to going from knowledge to understanding

Elaborative Interrogation involves explaining and describing ideas with many details. The process involves making connections among ideas you are trying to learn. These connections help the learner build schemas in their mind. The construction of schemas is the building block required for understanding.

Make a List
List key ideas from a current topic. Then, go down the list and ask yourself questions about how these ideas work together (or not) and why. The nature of the process can underpin the formation of a Brain Map.

What, How, and Why
By using this questioning scaffold, you will start to go from the basic recall of information (what) and then though explanation (how) will begin to see the connections between (why).

SketchNotes
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Applies to: English, Humanities, Sciences, and The Arts