Overview
More than 25 years of neuroplasticity research supports a shift in educational emphasis from acquiring content knowledge to building learning capacity and capability. It is well accepted that the brain has the ability to adapt and change. Cognitive neuroscience examines the brain’s underlying structures and systems that are responsible for the way we process and assimilate information; how we comprehend issues and develop realistic conclusions and plans to meet the various demands of life.

Independent Schools Victoria has partnered with Elite Minds to provide schools with the opportunity to undertake student-based cognitive training. Cognisess Learn is a brain-training platform that aims to measure broad-based student development in four domains: cognitive, emotional, personality and wellbeing.

Metacognition is traditionally defined as ‘thinking about our thinking’. The neuroscience of the learning brain has revealed that metacognition is also significantly governed by how we feel and by our ability to assess our context. When students are cued to take account of all three domains – how they think, feel and assess their context – their decision-making is transformed. They move from merely acting out (reactive behaviour) to more reflective behaviour.

Key points:
Independent Schools Victoria has partnered with Elite Minds to introduce Cognisess Learn, an online cognitive training program. The program harnesses ideas generated from the latest research in cognitive neuroscience indicating that the brain is continually changing.

- The Cognisess Learn program offers schools a brain training platform that aims to measure broad-based student development in four domains: cognitive, emotional, personality and wellbeing.
- It offers teachers the ability to differentiate learning for students and explain to them the biological basis of their thinking and learning.
- Cognisess Learn aims to empower students to learn more efficiently by understanding how their brain operates and reinforces each person is responsible for their own learning.
- It may help build capacity, speed and accuracy in cognitive skills.
Reflective behaviour is when there is a pause to review several choices and select the most appropriate way to proceed. An example of this is when a student develops a negative concept of a subject area because of a negative experience. The Cognisess Learn program is an education-specific brain training platform that links how students are feeling and the context that they find themselves. When students are offered an opportunity to re-evaluate their belief, explore how this belief was established and view alternatives, they may develop a more positive attitude. They gain a subjective experience of how they can actively change their brain and create new pathways for thinking. Through developing an understanding of the relationship between these domains, it can empower students and enable them to learn about how their brain operates and understand that they can be control and responsible for their own learning.

The Program

Cognitive psychologists have combined new information of neuroplasticity research with digital technology to design online brain training programs. Cognisess Learn captures information about a user’s performance each time they complete a particular task, as well as plotting the user’s progress over time. The metrics are generated automatically and the tasks are programmed to help the users improve their proficiency in each task area. A teacher or mentor mediates the program. Students play a series (or sequence) of online response tasks or games. During one of these weekly training sessions, students discuss the strategies that they are using to play the games. They also receive information from their teacher about the cognitive and neurological basis of their own thinking and learning. This helps them to develop awareness and understand the neuroscience behind the games, the brain and their own way of learning (metacognition).

Individual students can access their results and data at any time, and teachers can retrieve data from the entire cohort of students for analysis. The program provides teachers with the ability to compare results across a cohort and form greater insights into students’ skills and capabilities. This helps students understand their thinking and learning across subjects and general life situations.

The hierarchy of cognitive skills explored through Cognisess Learn include:
- sensory awareness – access to sensory information
- memory capacity – sensory reflexes and working memory
- attention span – focus and self-control
- processing capacity – response time, recognition and flexibility
- learning capacity – establishing meaning and association
- decision making – anticipation, judgement and problem solving
- behaviour – explorations of interactions and choices.

For More Information

To find out more about the Independent Schools Victoria partnership with Elite Minds and the Cognisess Learn brain plasticity online training platform, please contact:
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It’s been great to hear the students talk about goals they are setting for themselves so as to improve their long-term memory, and how activities such as mondial are good for helping them to improve their concentration and working memory by dividing their attention.

– Nara Thompson, Year 6 Teacher, Christ Church Grammar School

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