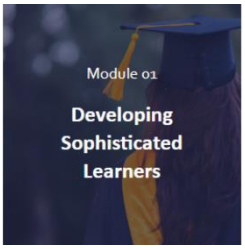
DEVELOPING SOPHISTICATED LEARNERS

Professional Development

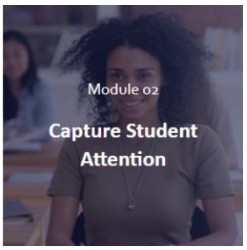


Module 1: Developing Sophisticated Learners

Students become sophisticated learners when we teach them in a way that fosters learning, while also developing their ability to learn independently. Understand the characteristics of a sophisticated learner and how to design your lessons to ensure students learn optimally.

What You'll Learn

- A framework for successful learning that is rooted in cognitive science
- The differences between a traditional education and one based on learning science
- The definition of a sophisticated learner and benefits for learning outcomes



Module 2: Capture Student Attention

Attention is a core cognitive skill that plays a critical role in learning. While students are often told to "pay attention," they are rarely taught how. Learn how to capture, keep, and gauge your students' attention.

What You'll Learn

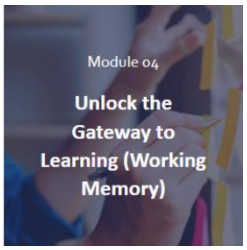
- The core cognitive skills essential for processing information
- Common causes of inattention
- Strategies to capture your students' attention

Module 3: Addressing Processing Speed

Processing speed refers to a learner's ability to perceive, integrate, and respond to visual, auditory, or motor information. Learn how to discern and tailor your teaching to accommodate variations in processing speeds within your classroom.

What You'll Learn

- Common symptoms of slow and fast processing speed on learning
- Teaching methods and modifications that support the variety of processing speeds that exist in any given classroom
- The relationship between processing speed and emotional wellbeing

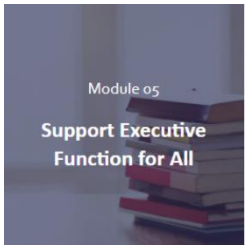


Module 4: Unlocking the Gateway to Learning (Working Memory)

It is difficult to identify a learning task that does not rely on working memory, the ability to mentally juggle information. Become well versed in the ins and outs of working memory and learn classroom strategies that support and strengthen it.

What You'll Learn

- How to arrange the content you are teaching to enhance working memory and reduce cognitive overload
- Strategies that students can use to optimize working memory
- The science of effective multimedia learning and methods to improve multimedia teaching

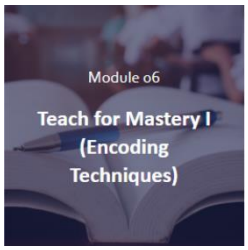


Module 5: Support Executive Function for All

Executive function skills predict academic and career success. Learn meaningful strategies to support your students' acquisition of executive function, and how to recognize and address executive dysfunction.

What You'll Learn

- A framework for executive function skills before, during and after goal-directed behaviors
- How to recognize and address symptoms of executive dysfunction
- Classroom strategies to support motivation, planning, emotional regulation, processing regulation, self-monitoring, and self-regulation

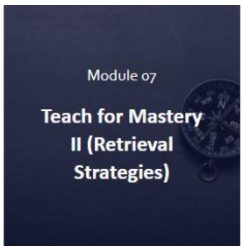


Module 6: Teach for Mastery I (Encoding Techniques)

Studies show students rely on ineffective strategies to learn resulting in superficial learning. Learn how to foster your student's ability to acquire knowledge using proven techniques that facilitate the encoding of new information.

What You'll Learn

- The architecture of human memory and its importance to learning success
- Commonly held illusions, misbeliefs, and memory myths that inhibit learning
- 8 evidence-based memory techniques that help students encode information



Module 7: Teach for Mastery II (Retrieval Strategies)

Traditional instruction is focused on getting information into students' brains. Compelling research reveals that pulling information out of the brain enhances learning. Learn how to incorporate retrieval practice into your teaching.

What You'll Learn

- The role of retrieval practice in forming durable and deep learning
- How to activate prior knowledge to aid memory
- Classroom strategies for integrating retrieval strategies into curriculum and lesson plans

Module 8: Foster Metacognition

Teaching metacognitive reflection is an effective strategy to accelerate student achievement. Learn how to provide students with practical strategies that foster metacognitive awareness and create the foundation for learning independently, effectively, and efficiently.

What You'll Learn

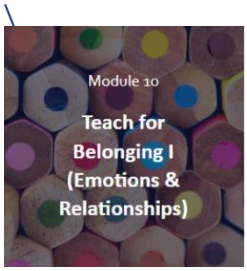
- How to measure your students' metacognitive skills
- How to capitalize on mistakes to promote learning success
- Classroom strategies to develop your students' ability to monitor and manage their own learning behaviors

Module 9: Provide Effective Feedback

Research suggests effective feedback, formative assessments, and peer-based learning are among the most effective ways a student can learn information. Learn how to integrate and apply these concepts into your classroom.

What You'll Learn

- How to use feedback to bolster self-esteem and encourage higher-level thinking
- How to use formative assessment effectively
- The power of peer-based feedback and learning in your classroom



Module 10: Teach for Belonging I (Emotions & Relationships)

Develop a better understanding of the interdependencies between cognition, emotion, and behaviors to better support your students. Learn how to foster positive emotions and behaviors that increase student engagement, effort and learning outcomes.

What You'll Learn

- Core components of Social-Emotional Learning, Positive Education, and Trauma-Sensitive Education
- Key student mindsets such as growth, belonging, and purpose/relevance.
- Classroom strategies to support positive emotions, engagement, and relationships in learning

Module 11: Teach for Belonging II (Engagement & Motivation)

Student engagement often decreases with every year of schooling. Yet, student learning requires their engagement and motivation. Learn what research reveals about the most effective ways for teachers to foster student motivation and engagement in the classroom.

What You'll Learn

- How to engage students using theories from cognitive science
- How to tap into intrinsic motivation including Self-Determination Theory
- Classroom strategies and methods that motivate students

Module 12: Understanding Cognitive Diversity

Learning is a cognitive process. Every classroom is cognitively diverse. Learn how to associate learning difficulties to cognitive skills, as well as refine your approach to how you teach through appropriate strategies to support students' areas of difficulty.

What You'll Learn

- How to understand cognitive diversity - often referred to as neurodiversity or neurodivergence
- Signs and accommodations for the most common learning differences in classrooms today including dyslexia, autism, twice-exceptional, non-verbal learning disabilities, and emotional and behavioral disorders
- How to target and strengthen cognitive skills to improve learning

How Educators Learn:

Instructional Design Based on Scientific Research

We Practice What We Teach: Our programs incorporate the scientific principles of human learning into our instructional design. Learning is active, engaging, collaborative, and application-based. Invigorate your lesson planning with science-based tools that will enable your students to master what you teach.

Program Elements

COGx Program Leaders

Program Leaders are assigned to support your learning journey. They monitor the Program and respond to your questions. You can also contact your Program Leader for on- demand support.

Priming Activities

Priming quizzes and open- ended interrogatories are used to get learners to think about the subject matter they are about to learn.

Retrieval Practice

To foster durable, flexible, and enduring learning, we apply retrieval strategies throughout the program, including elaboration, spacing, self- testing, and interleaving.

Video Micro-Lessons

Video lessons are delivered by 12+ expert educators, and leading researchers experienced in the translation of research on the science of learning into classroom application.

Classroom Application Guides

Takeaway posters are provided throughout the modules to guide the effective implementation of the concepts covered.

Peer-Based Feedback & Reflection

Learners receive and provide peers with anonymized feedback on lesson plan application assignments for deeper learning.

Discussion Boards

Modules include Discussion Forums to share ideas, collaborate, and provide and receive valuable peer feedback. Program Leaders are also constantly available seek clarity or ask a question on any topic throughout the learning journey.

Alumni Practitioner's Platform

Program alumni (Science of Learning Practitioners) can join an online platform to share resources and strategies for ongoing application of concepts and guidance.

Application Hour

Under the guidance of the Program Leader, educators apply academic research to their specific student population and subject matter during live, virtual training sessions