



COGx Science of Learning Online

DISTILLING THE SCIENCE OF LEARNING *for School Leaders*

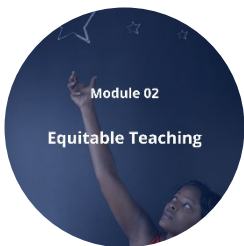
Program Outline

Science of Learning for School Leaders equips K-College administrators with a high-level understanding of the core learning principles from cognitive science that drive academic performance and the tools to align instruction accordingly. There are 4 modules in the program that are grouped by theme: Developing Sophisticated Learners for Leaders, Equitable Teaching, Effective Instruction, and Effective Learning.



Module 1: Developing Sophisticated Learners for Leaders

How is learning success defined at your school? Learn how to establish a community-wide definition of the knowledge and skills a graduate will possess. Meanwhile, identify organizational strengths, and set tangible goals for continued growth.



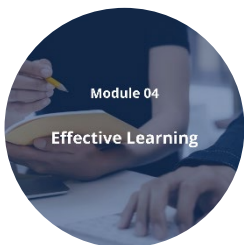
Module 2: Equitable Teaching

Learn how emotions influence specific cognitive domains critical for learning. Explore ways to inspire your faculty, cultivate intrinsic motivation, and create a community with a strong sense of inclusion and belonging.



Module 3: Effective Instruction

Align instruction with conditions for learning success to optimize academic performance. Understand the hierarchy of human learning, including attention, processing speed, and working memory. Define barriers for implementation, and explore possible solutions.



Module 4: Effective Learning

Develop a holistic understanding of learning including the skills and behaviors effective learners utilize. Form an understanding of metacognition, executive function, and long-term memory, that will trickle down to faculty and students. Shift your community's focus to mastery of content and skills.



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Customization Opportunities

COGx's commitment to understanding each organization underpins each step of the adoption process including design, implementation, and application. Below is an explanation of the intentional instructional design of the program. In addition, the areas that invite customization are identified. This includes the option of adding additional content to deepen knowledge of a particular topic(s). Further, the "Ponder" and "Apply" sections can be co-created to fit your unique community.

Content

We understand time is limited as school leaders. As such, we've synthesized the most impactful insights into a brief program. This program captures the essence of the professional development program for educators on the Science of Learning. If there is interest in delving deeper into a topic, we are happy to design additional content.

Pace

Each page covers a central topic and is divided into four parts: "Ponder," "What Is It and Why Is It Important?" "Apply," and "Key Takeaways."

Ponder

This section relies on the principle of "priming" which fosters a richer learning experience by signalling what is important and forthcoming, while engaging prior knowledge and reducing cognitive load. This section can be customized to reflect a specific community.

What Is It and Why Is It Important?

Here, we summarize research from cognitive science and apply insights to teaching and learning. Meanwhile, information is intentionally presented in a manner that is conducive to learning.

Apply

Transfer is the application of knowledge to new situations. Opportunities to practice integrating skills help to develop mastery; this portion is devoted to just that. You'll have the opportunity to apply what you've learned directly to your context, your school and its constituents (especially your colleagues). This section can be customized to reflect a specific community.

Key Takeaways

Last, the key takeaways synthesize the content and give a look into what educators learn when they participate in *Developing Sophisticated Learners*, an online professional development catalog and experience.

Synchronous Support

In addition to the self-paced work, school leaders are invited to attend a Mission Mapping workshop and up to 1 hour of personalized consulting. The Mission Mapping workshop prepares a school leader(s) to advocate for the Science of Learning in their community. Consulting calls are personalized to individual school needs and are with COGx representatives who have successfully led schools in adopting the Science of Learning.



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How You Learn

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. Carefully designed program elements and ongoing guidance and support empowers educators and students to apply what they've learned.

Expertly Led Guidance & Support



COGx Program Leaders

Program Leaders are assigned to support the learning journey. They monitor the program and respond to questions.



Application Hour

Coaching and collaboration sessions will be held during the program to allow participants to clarify any questions about the program content.



Discussion Boards

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

Research-Informed Instructional Design



Priming Activities

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



Pre-Teaching Terms

Teachers interact with digital flashcards that cover content-specific terminology at the start of each module.



Retrieval Practice

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



Dual Coding

We apply dual-coding theory throughout our programs by including images and graphics as well as in our micro-videos.



Active Learning & Transfer



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.



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.