

Wednesday, November 8, 2017

8:00 a.m. - 4:00 p.m.

PC2 Executive Function, Metacognition, and Strategic Thinking: Preparing Learners for Effective Academic Self-Management

Chair: Sucheta Kamath, M.A., BC-ANCDS, CCC

Success in teaching and learning rests on the shoulders of teachers and students. Conventional wisdom and compassionate intuition make educators want to implement teaching methods to help circumvent students' difficulties in learning, organizing, and producing work. However, students' difficulties are often related to their lack of awareness of their own approaches to managing their learning, which often result from underdeveloped executive-function processes.

In this symposium, presenters address a critically important piece of this puzzle by discussing the vital connections between executive-function processes, metacognitive awareness, and self-directed learning. Presenters highlight well-researched and effective approaches to fostering metacognitive awareness and enhancing student's self-knowledge, strategy use, and flexible thinking. Participants leave with specific and practical teaching tools that can be immediately implemented into their classroom curriculum.

Executive Function and Metacognitive Awareness: Teaching Students to Learn HOW to Learn

Lynn Meltzer, Ph.D.

In our 21st-century schools, academic performance is dependent on students' self-understanding and their ability to plan, organize, prioritize, and flexibly shift approaches. These executive functions affect students' performance in most academic areas, but particularly in reading comprehension, writing, math problem-solving, and studying. This presentation focuses on practical approaches for promoting metacognitive awareness, flexible thinking, and executive-function strategies as part of the classroom curriculum across grade levels. Presenters emphasize the importance of fostering metacognitive awareness in students so they understand their strengths and weaknesses and which strategies they can develop to help them learn HOW to learn.

Executive Functioning, Self-Regulation, and ADHD: The Hybrid Theory and Its Implications for Management

Russell Barkley, Ph.D.

Dr. Barkley has developed one of the leading theories of executive functioning and its role in the nature of ADHD. In this presentation, he explains the current understanding of ADHD as a disorder of attention and inhibition. Then he shows why this view must be broadened to include executive functioning (EF) and the self-regulation it provides. He then explains his hybrid theory of EF and how it applies to a clinical understanding of ADHD. This model views EF as forms of self-directed behavior that permit self-regulation and self-modification so as to alter the likelihood of future events and the general welfare of the individual. These self-directed actions form an extended phenotype from brain functioning into the

ever widening spheres of daily adaptive, self-reliant, and cooperative social functioning across the major domains of daily life activities in which humans must function effectively to survive and prosper. This view helps to illuminate the pervasive adverse impact of ADHD on most domains of major life activities.

Training Executive Functions to Create Self-Aware and Strategy-Centered Students

Sucheta Kamath, M.A., BC-ANCD, CCC

There is an implicit assumption that students will accrue knowledge as they engage in the academic tasks designed by their teachers and that these tasks convey information to students about the teachers' intent. On the contrary, self-regulating one's learning involves surveying the learning context, appraising the teacher's intent, crafting effective strategies, and managing performance outcomes. Executive functions come into play only when self-regulation is deliberate, which requires self-awareness, awareness of performance expectations and strategic thought, and adaptive execution. In this presentation, the presenter discusses metacognitive training that is essential for strategy generation and outlines ways to promote a deeper approach to learning that is characterized by a heightened desire for self-understanding, deliberate problem solving, emotional regulation, and reflective learning.

Teaching Students to Manage the Ultimate Executive Juggling Act: Academic Writing

Bonnie Singer, Ph.D.

This session begins with an exploration of the ways in which executive functions both support and constrain teachers and students alike when it comes to academic writing. The presenter then provides a brief overview of the theoretical framework of a method for teaching expository writing called EmPOWER (Singer & Bashir, 2000), highlighting the ways in which it naturally scaffolds executive functions and language skills. Then, the presentation delves into the process involved in adopting a schoolwide, crosscurricular, systematic approach to teaching expository writing aimed at unifying instructional practice in a learning community. Looking at outcome data from K–8 schools serving bright students with dyslexia and related learning differences, participants examine the aspects of student writing that changed in response to this teaching method and identify additional components of instruction that are necessary for a comprehensive and effective writing curriculum.

Discloser: Sucheta Kamath has no relevant financial relationships to disclose. Dr. Lynn Meltzer is the director of the Research Institute for Learning and Development (ResearchILD) and may discuss strategies that are included in the SMARTS Online Executive Function and Mentoring program. Dr. Russell Barkley may receive speaking fees and honoraria. Dr. Bonnie Singer holds intellectual property rights in some of the instructional methods that will be shared in this presentation, and she receives speaking and consulting fees and honoraria. There are no nonfinancial relationships to disclose.