

## **METACOGNITION**

Building metacognitive skills with students has been directly linked to supporting students who have learning differences and disabilities, as well as supporting all students. Building metacognitive skills allows us to "think about thinking," which in turn helps us to reflect on how we learn and who we are so that we are better equipped to learn. While there is considerable evidence that metacognition can be a powerful tool to enhance learning, much less is known about how to effectively implement metacognition in the classroom. In 2019, 148 participants from 21 countries explored metacognition with us.

## **KEY INSIGHTS**

Jagged learning profiles. Participants self-assessed the different factors that shaped their learning and reflected on how we all have different "learning profiles". By naming these factors, participants built self-awareness and identified ways to enhance their ability to learn. This was scaffolded on the neurodevelopmental framework, which is composed of eight "constructs," such as mental energy and visual thinking. These constructs are based on research from neuroscience, cognitive psychology, developmental research, and related fields about how the brain functions and how these functions affect learning and performance at any point in a person's development.

Low cost/high impact strategies. By reflecting on the research of the Education Endowment Foundation, participants identified ways in which introducing metacognition in the classroom can be a low cost and high impact intervention. When applied effectively, supporting metacognition of students can increase progress by seven months. However, less is known about how to effectively implement metacognition in the classroom. This served as a point of discussion and reflection among the group as they tested, shared, and identified strategies for effective implementation.

Metacognition in conjunction with subject knowledge. Research suggests metacognition is most powerfully taught when in combination with specific content areas. Participants shared ideas on how best to integrate metacognition into different subject areas.

Power of teamwork. While metacognition in one sense is about self-awareness, it is most effectively implemented through teamwork. When peers can support each other in a constructive and trusting way, this helps accelerate progress.

Supporting Struggling Students. Building on research from the Child Mind Institute, participants identified ways that metacognition can be particularly helpful for students who are struggling. By helping them situate their current experience as part of a longer learning journey, participants found ways to help their students feel less "stuck", building growth mindsets, and fostering confidence in their learning.

The Global Learning Lab hosts learning loops regularly. They examine research, on the ground video examples, and other guidance for classrooms and communities. We also encourage you to explore other Learning Loop insights.

## **CLASSROOMS & RESOURCES STUDIED**

Wisdom Amouzou's Classroom, Denver, Colorado, USA

Maggie MacDonnell's Classroom, Canadian Arctic (Varkey Global Teacher Prize Winner)

Jesus Insilada's Classroom, the Philippines (Varkey Global Teacher Prize Finalist)

"Strategies for Teaching Metacognition in Classrooms" from the Brookings Institute

"Metacognition and Self-Regulated Learning in Student-Centered **Learning Environments**", journal article by Roger Azevedo, Reza F. Behnagh, Melissa Duffy, Jason M. Harley, and Gregory Trevors