

# BELIEVE

Do teachers believe it's important to teach conceptual understanding, multi-step problem-solving and executive functions and WHY?



#### **FRAME**

What are teachers' mental models of learning conceptual understanding, multi-step problem-solving and executive functions? How do they think kids learn?



#### KNOW

How do they know how to teach in this way and what supports do they have to do so?



#### **ACT**

What are the contexts they need or build to teach for conceptual understanding, multi-step problem-solving and executive functions?



#### ADAPT

How do they adapt in the moment? What do they do in the moment to execute?



#### REINFORCE

How do they know that what they are doing is supporting their belief and mental model? What feedback do they get?

### **SUMMARY**

**Facilitators** 

In Facilitator mode, teachers have varying levels of belief in the importance of teaching for conceptual understanding. The Facilitator mental model connects to teachers' belief in the challenging nature of math content.

In Facilitator mode, teachers may feel a lack of confidence in their own math knowledge or pedagogical skills. Teachers in Facilitator mode create learning environments that value student preferences and engagement. In Facilitator mode, teachers may be caught off-guard when they need to adapt right in the moment. Because teachers in Facilitator mode see math as a possibly tough subject and success as their students' apparent ability to engage with the content, they look for feedback around engagement.

## **OPPORTUNITIES**

Teachers in Facilitator mode believe in a student-centered approach to teaching and learning, centering students to ease the intimidation factor that they believe that math can have.

- How might we help teachers often in Facilitator mode own the math and develop their own confidence?
- How might we support teachers often in Facilitator mode in seeing and valuing the range of student attitudes toward math?
- How might we build on this studentcentered belief to support teachers in developing student EFs?

In Facilitator mode, teachers frame math as a subject that can be intimidating to some students and so their mental model is focused on creating safe learning environments that challenge gently.

- How might we help teachers in Facilitator mode explore other ways to make math feel safe (e.g. normalizing mistakes)?
- How might we let teachers in Facilitator mode learn from students who have other mindsets?
- How might we leverage EFs as a tool for building students' capacity for tackling challenging math?

In Facilitator mode, teachers can feel hesitant to adopt new tools or resources if they don't fit within their current view of their own subject knowledge and mastery.

- How might we help teachers in Facilitator mode use technology as a place to safely challenge students?
- How might we offer teachers in Facilitator mode clear and specific ways to customize tools, so that they feel more comfortable and confident in adopting them?

Teachers in Facilitator mode seek to build student-centered classroom contexts, attentive to student preferences and ways of working.

- How might we build on these teachers' student-centricity to expand this more content-rich or conceptuallymeaningful ways that students can be centered in the classroom?
- How might we show teachers how student EFs can contribute to a student-centered classroom culture?

Teachers in Facilitator mode might be resistant or overlycautious about adapting in the moment when things don't go according to plan.

- How might we help teachers in Facilitator mode feel more confident in their ability to adjust in the moment?
- How might we give teachers in Facilitator mode support in finding new ways for how to adjust?

Because teachers in Facilitator mode are focused on math's possible intimidation factor, they look for student engagement to gauge progress.

- How might we help teachers in Facilitator mode find more ways to interpret and understand student engagement?
- How might we give teachers often in Facilitator mode feedback on how engagement reflects student connection to math concepts?
- How might we offer teachers in Facilitator mode this feedback in the moment so that they may use it more effectively?

