

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

Directors

When in Director mode, teachers believe in teaching conceptually because they see it as the best way to make math meaningful for students.

Teachers in
Director mode
frame conceptual
understanding
through application to
real world problems.

In Director mode, teachers turn to district resources, coaches, and mentors for guidance. Teachers in Director mode seek to create focused environments where students can learn in the ways that match their preferred ways of working.

In Director mode, teachers are challenged to adapt daily. In Director mode, teachers use a range of feedback inputs to see how each student is performing so that they can adjust their teaching accordingly.

OPPORTUNITIES

In Director mode, teachers' beliefs are focused on how students apply math to real world contexts and how different channels help students to internalize concepts.

- How might we help teachers in Director mode not only offer, but integrate, multiple channels (e.g., videos, live instruction, readings) into their classroom?
- How might we support teachers in Director mode in connecting math to the real world?
- How might we help teachers often in Director mode see the development of student EFs as a way to build the social emotional skills they are sometimes challenged by?

Teachers in Director mode frame math learning through connections to students' lives, using metaphors and scenarios to link math content to lived examples.

- How might we help teachers in Director mode find resonant examples that are conceptually solid and culturally responsive?
- How might we help teachers in Director mode develop teachers' own conceptual insights through the work that they give to students?
- How might we build upon the desire of teachers in Director mode to support student agency, demonstrating the power of EFs to support this goal?

In Director mode, teachers are open to input, but need for it to be plug-and-play in its application.

- How might we help teachers in Director mode manage the time pressure that they feel?
- How might we offer step-by-step implementation guides that help them to anticipate potential scenarios of use (and misuse!)?

While in Director mode, teachers are tuned in to student ways of working, wanting to set each one up to learn in ways that work for them. They value student voice, but have not yet fully activated this value.

- How might we support teachers in Director mode in rolling out projects that apply math concepts in real world contexts?
- How might we help teachers in Director mode teach their students to collaborate?
- How might we connect student EFs to their ability to toggle between ways of working?

In Director mode, teachers are stressed by adaptation, particularly feeling the pressure to fit a lot of content into what feels like not enough time.

- How might we help teachers in Director mode see the connections between skills to alleviate the time pressure they feel?
- How might we help teachers in Director mode find additional ways to elevate student voice in service to teaching and learning?

In Director mode, teachers set up lots of feedback opportunities for themselves and their students. They look for math growth and achievement.

- How might we help teachers in Director mode own their contribution to the social emotional growth of the students...and connect it to their math learning?
- How might we help teachers in Director mode measure the development of students' EFs?

