DREME Math Observer App
Getting Started - Summary

The DREME Math Observer was designed by early math researchers at Vanderbilt University in partnership with administrators, principals, coaches, and math teachers to provide a practical way to observe high-leverage math instructional practices in Pre-K through 2nd grade classrooms.

Unlike commonly used observation metrics, which just spit out a score (like "Meets Expectations"), this app can help with the question of "what's next?" It was designed to support professional development, not be an evaluation.

The app allows you to track the frequency of different types of practice over multiple observations. It provides suggestions for feedback sessions with teachers based on your observations. The goal is to identify the valuable things math teachers are already doing and help them build on them.

Before using the DREME app, it's helpful to review the dimensions of practice and pick one or two that are aligned with your coaching goals. For instance, I may decide that I want to support more student math talk at my school. That aligns with the "Student Practices" domain in the app. The Student Practices dimensions I may want to look at are "Peer Talk," and "Sharing Thinking."

The app asks me to classify each dimension into the best-fit category. For instance, if I am looking for Sharing Thinking, I will want to pay attention to how many students were sharing how or why: None, Several, or Most.

The app provides some structured guiding questions you can use after your visit to debrief with teachers. The questions will generate based on your rating. For example, if you observed no students shared how or why, the app suggests the following questions you might pose to the teacher:
- How were you checking whether students understood the concept today?
- Are there ways for students to share what they're learning with their peers in future lessons?
- Are there ways to help students who have a hard time expressing themselves?

You can use the notes and any pictures you took to help share strengths and opportunities with the teacher and set some concrete goals for a future lesson.

Use the Trends function to look for patterns in the teacher's practice, and to get ideas for things to look for in future observations.

This is a quick start guide, but you can refer to the full user guide for more about getting the most out of all the features of the DREME app.

To simplify this Quick Start Guide, you can follow the steps below.

1) Decide what to focus on.

This app is intended to be flexible so it can fit into your existing coaching or professional development model. Four different "domains" allow you different "lenses" through which you can observe a math lesson. You might choose to observe across all four domains simultaneously or choose to focus on one domain or even several specific practices.

2) Take lots of notes.

Note taking is a key feature of data collection in this app. Each subdomain offers a different pop out field to take notes about that practice. For instance, if you are interested in how students are using tools, find the Using Tools section and select the notes icon to pop out the field. It is likely that you will be switching between categories to take notes during most of the observation. The notes can be essential to recreating the details of the lesson later and can guide you when determining which practice best describes your observation.

3) Take photos.

You can take photos of classroom practices and students' work that you want to review later. You can take many photos and store them in a gallery under each domain.

4) Choose a rating.

When you determine you have enough information for a subcategory, choose a rating. These can be adjusted at any time during the observation. More information about each rating in the full User Guide and eventually, in accompanying tutorial videos.

5) Rate student engagement.

The app will alert you every several minutes to record the phase of the lesson (e.g., intro activity, main task, wrap up) and the overall class engagement at that moment. This can be helpful in reviewing and reconstructing the whole lesson with the teacher during a debrief meeting with them. This rating is optional and can be turned off or on.

6) End the observation.

When your observation is complete, select the X at the top right of the screen. You will be asked to fill in notes about the math content and the objective.

7) Review the summary.

The app includes several summary sections to help you understand the observation. You can record notes about overall strengths and opportunities you saw.

8) Debrief with the teacher.

You can explore the extended summaries on your phone. Each item you selected will show you the category of practice you selected, as well as the ones not selected. You can use that information to set goals for improving practice. The extended summary will also generate questions you can use to have conversations with the teacher, rather than just giving them a rating. Using your notes and other contextual data you collected, you can recreate the lesson with the teacher.

9) Set goals and give teacher a record.

During or immediately after your debrief, set goals about specific practices to work on. You can take notes about these in the observation summary. Then you can send a pdf attachment of the lesson to the teacher's email directly from your phone. The pdf will show the teacher which items you selected, and your notes about their strengths and next steps.

10) Use previous observations as a guide.

Before your next observation, you can review the last observation and the goals that you set together. You can use this to help guide your follow-up observation and give you some practices to pay attention to.