How Can I Use DoS?

- Share ratings and evidence internally with staff to have productive discussions about teaching approaches
- Aggregate data across programs, regions, or state
- Pinpoint strengths and weaknesses of particular curricular units over others

How Do I Train to Use DoS?

- Attend in-person or online training
- Conduct inter-reliability video simulation exercise
- Attend an online calibration session to review possible difficulties you are experiencing with reliable scoring
- Conduct 2 practice observations
- Upload data, so PEAR can provide individualized feedback
- Upon successful completion of all these requirements, you will be DoS certified for 2 years and can use the tool to meet your site’s needs
- After 2 years, there are opportunities for re-certification

Getting Started

To get started with DoS in Indiana, please contact:

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Dimensions of Success
a pear observation tool

DoS
What is DoS?
The Dimensions of Success observation tool, or DoS, pinpoints twelve indicators of STEM program quality in out-of-school time. It was developed and studied with funding from the National Science Foundation (NSF) by the Program in Education, Afterschool and Resiliency (PEAR), along with partners at Educational Testing Service (ETS) and Project Liftoff.

DoS was designed to be a self-assessment observation tool for STEM program administrators and staff. It can also be used by external evaluators or funders to track quality in programs over time or quality across a city or a state.

Observation field notes and scores are entered online, and PEAR can provide customized reports that show trends across a curriculum or staff.

What does DoS data look like?
The first three dimensions look at features of the learning environment that make it suitable for STEM programming (e.g., do kids have room to explore and move freely, are the materials exciting and appropriate for the topic, is time used wisely and is everything prepared ahead of time?).

The second domain looks at how the activity engages students: for example, they measure whether or not all students are getting opportunities to participate, whether they are doing activities that are engaging them with STEM concepts or something unrelated, and whether or not the activities are hands-on, and designed to support students to think for themselves versus being given the answer.

The next domain looks at how the informal STEM activities are helping students understand STEM concepts, make connections, and participate in the inquiry practices that STEM professionals use (e.g., collecting data, using scientific models, building explanations, etc.).

Finally, the last domain assesses the student-facilitator and student-student interactions and how they encourage or discourage participation in STEM activities, whether or not the activities make STEM relevant and meaningful to students’ everyday lives, and the experiences. Together, these twelve dimensions capture key components of a STEM activity in an informal afterschool or summer program.

The DoS tool focuses on understanding the quality of a STEM activity in an out-of-school time learning environment and includes an explanation of each dimension and its key indicators, as well as a 4-level rubric with descriptions of increasing quality.