Walkthrough Reference Sheet

Phenomena/Problems	
Less like	More like
- Focus on delivering Disciplinary Core Ideas to students organized by topic. - Making sense of phenomena and designing solutions to problems are separate from and not a central part of learning (e.g., used only as an engagement tool to introduce the learning, only loosely connected to a Disciplinary Core Idea, or used as an end of-unit enrichment activity). - Leading students to just getting the "right" answer when making sense of phenomena. - Instructions for students to "design solutions" are framed as a step-by-step exercise. - Only talking or reading about phenomena or how other scientists and engineers engaged with phenomena and problems.	- Engaging all students with phenomena and problems that are meaningful and relevant and experienced directly or through rich multimedia. - Students using appropriate Science and Engineering Practices and Crosscutting Concepts to make sense of phenomena and/or to design solutions to give a context and need for the Disciplinary Core Ideas to be learned. - Using student sense-making and solution-designing as a context for student learning and a window into student understanding of all three dimensions. - Students learning aspects of how to design solutions while engaged in the design process.
Integrated Three Dimensions	
Less like	More like
- Using Science and Engineering Practices and Crosscutting Concepts only to serve the purpose of students acquiring more Disciplinary Core Idea information. - Teachers only posing questions with one correct answer. - Tasks that focus on one dimension at a time and are mostly concerned with measuring students' ability to remember information. - Students learning the three dimensions in isolation from each other. - Prioritizing science vocabulary and definitions that are introduced before (or instead of) students develop a conceptual	- Careful design to build student proficiency in the three dimensions. - Teachers posing questions that elicit the range of student understanding. - Students discussing open-ended questions that focus on the strength of evidence used to generate claims. - Facts and terminology learned as needed while developing explanations and designing solutions supported by evidence based arguments and reasoning.

understanding.	

Walkthrough Reference Sheet

Implementation of District Materials			
Not Evident	Inconsistent Implementation	Early Implementation	Advanced Implementation
Teacher is using traditional kinds of instructional materials (e.g., knowledge and practice taught separately, such as a lecture or worksheet and a confirmatory lab) Teacher's use of materials supports one-dimensional instruction.	Teacher sporadically implements selected lessons or units from the materials. Teacher modifies the materials in ways that dilute the rigor of student experience or quality of learning outcomes.	Use of materials may appear mechanical or scripted with slower pacing. Missed opportunities to help students make connections to phenomena or problems during activities.	Teacher's use of materials supports coherent, three dimensional instruction. Modifications that enhance student learning experiences and outcomes are made to the materials, based on learner needs and interests.