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Nota di contenuto	Laying the groundwork : setting goals and selecting tasks -- Introducing the five practices model : contrasting the practices of two teachers -- Getting started : anticipating and monitoring students' work -- Making decisions about the discussion : selecting, sequencing, and connecting -- Encouraging and guiding student thinking -- Positioning five practices discussion within instructional design -- Beginning secondary science teachers use the model : lessons learned.
Sommario/riassunto	Robust and effective classroom discussions are essential for providing students with opportunities to simultaneously engage in science practices while learning key science content. Using numerous examples and science learning tasks, the authors show how teachers can plan the lesson to encourage students to not only learn science content but employ disciplinary practices as well. This volume outlines the five practices teachers need for facilitating effective inquiry-oriented classrooms:Anticipate what students will do--what strategies they will use--in solving a problemMonitor their work as they approach the problem in classSelect students whose strategies are worth discussing

in classSequence those students' presentations to maximize their potential to increase students' learningConnect the strategies and ideas in a way that helps students understand the science learnedThe 5 Practices framework identifies a set of instructional practices that will help teachers achieve high-demand learning objectives by using student work as the launching point for discussions in which important scientific ideas are brought to the surface, contradictions are exposed, and understandings are developed or consolidated.About the Authors: Jennifer Cartier is the director of teacher education and a member of the science education faculty at the University of Pittsburgh. Her work focuses on the design and facilitation of learning contexts for pre-service and early career teachers.Margaret Smith holds a joint appointment at the University of Pittsburgh as professor of mathematics education in the School of Education and as Senior Scientist at the Learning Research and Development Center. Her research focuses on what teachers learn from the professional education experiences in which they engage.Mary Kay Stein holds a joint appointment at the University of Pittsburgh as professor of learning sciences and policy and as Senior Scientist at the Learning Research and Development Center. Her research focuses on mathematics teaching and learning in classrooms and the ways in which policy and organizational conditions shape teachers' practice. Danielle K. Ross is a teaching fellow and doctoral candidate in science education at the School of Education of the University of Pittsburgh. Her work focuses on teacher learning and the design of learning contexts for beginning teachers. She was previously a biology and ecology teacher at Leechburg Area School District in Leechburg, Pennsylvania.