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Soggetti	Science - Study and teaching Study skills Teaching Science Education Study and Learning Skills Didactics and Teaching Methodology Mètodes d'estudi Aprentatge actiu Educació STEM Disseny curricular Avaluació educativa Llibres electrònics
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Nota di contenuto	Chapter 1.Introduction: Creative Pragmatics in a Complex World -- Chapter 2.Participatory Design for STEM Education -- Chapter 3. Creative Learning and Artefacts in Mathematics Education -- Chapter 4. Active and Agentic: Student-Centred Learning in a 2-Year Introductory Science Program -- Chapter 5. Spaces for Active Learning in University Science Education -- Chapter 6. Tackling Global Design Innovation Challenges through Project-Based Learning: Stanford ME310 and the SUGAR Network -- Chapter 7. FabLabs and the Maker Movement: Learning through Making -- Chapter 8. Studio-based Learning for Design Practice -- Chapter 9. Evaluating STEM-Education: Developing Teaching through Assessment with Emotion -- Chapter 10. A Pedagogy

of Enactment: On Active Learning in Science Teacher Education -- Chapter 11. Innovating Science Education at a National Level -- Chapter 12. Rethinking 'Creative Pragmatics' and Future STEM Education.

Sommario/riassunto

This edited volume is an invitation to redesign STEM higher education. It shows the way to active learning in diverse scenarios and provides educators, leaders and policymakers with a visionary approach to active learning and hands-on examples of how education can help students navigate complexity and unpredictability—the challenges of contemporary society. Featuring contributions from a diverse array of scholars and practitioners, this book explores:

- Creative learning strategies
- Dynamic teacher-student interactions
- Innovative assessment methods
- The design of engaging learning environments

Integrating science education with perspectives from pragmatism, science and technology studies, the humanities, art and design, this book presents a framework for understanding knowledge as an evolving, performative process. Through insightful case studies, the book emphasises agency and creativity as essential elements of learning, promoting interdisciplinary collaboration and flexible problem-solving. Chapters 1 and 7 are available open access under a Creative Commons Attribution 4.0 International License via link. springer.com.
