

1. Record Nr.	UNINA9910784222303321
Titolo	Handbook of college science teaching [[electronic resource] /] / Joel J. Mintzes and William H. Leonard, editors
Pubbl/distr/stampa	Arlington, Va., : NSTA Press, c2006
ISBN	1-933531-90-8
Descrizione fisica	1 online resource (432 p.)
Altri autori (Persone)	MintzesJoel J LeonardWilliam H. <1941->
Disciplina	507.1/1
Soggetti	Science - Study and teaching (Higher) - United States
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Unit 1: Attitudes and Motivation; Ch1: Science Anxiety: Research and Action; Ch2: Improving Student Attitudes Toward Biology; Ch3: Motivation to Learn in College Science; Unit II: Active Learning; Ch4: Experiential Learning in a Large Introductory Biology Course; Ch5: Strategies for Interactive Engagement in Large Lecture Science Survey Classes; Ch6: Undergraduate Research in Science: Not Just for Scientists Anymore; Ch7: Concept Mapping in College Science; Ch8: Peer Instruction: Making Science Engaging; Ch9: Open Laboratories in College Science Ch10: New Physics Teaching and Assessment: Laboratory- and Technology-Enhanced Active Learning Unit III: Factors Affecting Learning; Ch11: Developing Scientific Reasoning Patterns in College Biology; Ch12: Learning Science and the Science of Learning; Ch13: The Impact of a Conceptually Sequenced Genetics Unit in an Introductory College Biology Course; Ch14: Do Introductory Science Courses Select for Effort or Aptitude?; Ch15: Active Learning in the College Science Classroom; Unit IV: Innovative Teaching Approaches; Ch16: Incorporating Primary Literature Into Science Learning Ch17: Fieldwork: New Direction and Exemplars in Informal Science Education Research Ch18: Using Case Studies to Teach Science; Ch19: Mating Darwin with Dickinson: How Writing Creative Poetry in Biology Helps Students Think Critically and Build Personal Connections to Course Content; Ch20: Constructive-Developmental Pedagogy in

Chemistry; Ch21: Converting Your Lab From Verification to Inquiry; Unit V: Use of Technology; Ch22: Technology-Enriched Learning Environments in University Chemistry; Ch23: Animating Your Lecture Ch24: Instructional Technology: A Review of Research and Recommendations for UseCh25: Web-Based Practice and Assessment Systems in Science; Ch26: Teaching Students to Evaluate the Accuracy of Science Information on the Internet; Unit VI: Meeting Special Challenges; Ch27: Science, Technology, and the Learning Disabled: A Review of the Literature; Ch28: Diversity in the Physical Science Curriculum: The Intellectual Challenge; Ch29: Incorporating Cultural Diversity Into College Science; Ch30: Alternative Conceptions: New Directions and Exemplars in College Science Education Research Ch31: Applying Conceptual Change Strategies to College Science TeachingUnit VII: Pre-College Science Instruction; Ch32: Ensuring That College Graduates Are Science Literate: Implications of K-12; Ch33: The High-School-to-College Transition in Science; Ch34: Factors Influencing Success in Introductory College Science; Unit VIII: Improving Instruction; Ch35: Assessment Practices in College Science: Trends From the National Study of Postsecondary Faculty; Ch36: Making Choices about Teaching and Learning in Science; Ch37: Science and Civic Engagement: Changing Perspectives from Dewey to DotNets Ch38: Using Research on Teaching to Improve Student Learning

Sommario/riassunto

Are you still using 20th century techniques to teach science to 21st century students? Update your practices as you learn about current theory and research with the authoritative new Handbook of College Science Teaching. The Handbook offers models of teaching and learning that go beyond the typical lecture-laboratory format and provide rationales for new practices in the college classroom. It is a definitive guide for science professors in all content areas and even includes special help for those who teach nonscience majors at the freshman and sophomore levels.
