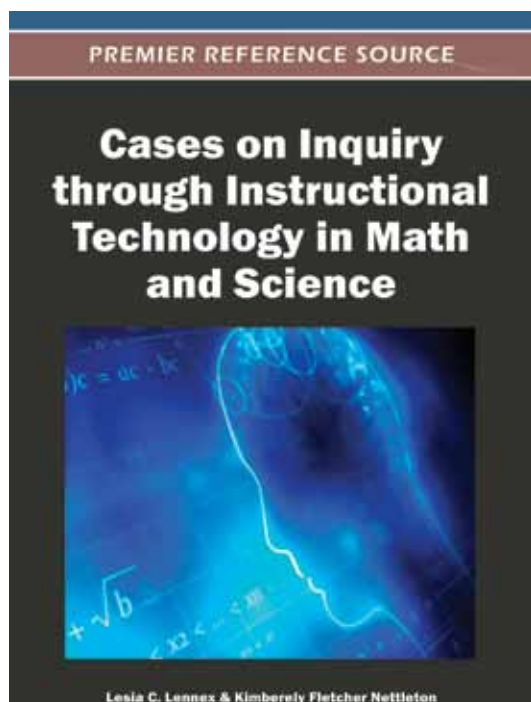


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Cases on Inquiry through Instructional Technology in Math and Science



Lesia Lennex (Morehead State University, USA) and
Kimberly Fletcher Nettleton (Morehead State University, USA)

There exists a wealth of information about inquiry and about science, technology, engineering, and mathematics (STEM), but current research lacks meaningfully written, thoughtful applications of both topics.

Cases on Inquiry through Instructional Technology in Math and Science represents the work of many authors toward meaningful discourse of inquiry used in STEM teaching. This book presents insightful information to teachers and teacher education candidates about using inquiry in the real classroom, case studies from which research suggests appropriate uses, and tangible direction for creating their own inquiry based STEM activities. Sections take the reader logically through the meaning of inquiry in STEM teaching, how to use technology in modern classrooms, STEM projects which successfully integrate inquiry methodology, and inquiry problem solving within STEM classrooms with the aim of creating activities and models useful for real-world classrooms.

Topics Covered:

- Assessing Science Inquiry
- Collaborative Scientific Project Management
- Concept Maps
- Digital Stories
- Inquiry-Based Learning and Robotics
- Mobile Technology in the Classroom
- Science Education Research
- Serious Educational Games (SEGs)
- Technology and the Preschooler
- Visualizing Content

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Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

Lesia Lennex received her doctorate in Curriculum and Instruction from the University of Tennessee, Knoxville. She is currently an Associate Professor of Education in the Department of Middle and Secondary Education at Morehead State University, Morehead, Kentucky. Dr. Lennex holds degrees in biology, anthropology, and curriculum and instruction. She researches, presents, and publishes in technology issues and integration for P-16 schools, NCATE accreditation Web sites, biology curriculum, and ethnobotany. Dr. Lennex is a former high school science teacher in biology, chemistry, physics, and ecology. In its founding year, she was the Editor-in-Chief of Kentucky Learning Depot, an online learning repository from the Council on Postsecondary Education 2009-2010. Dr. Lennex is the Chair of Information Technology Education SIG for the Society for Information Technology and Teacher Education (SITE) 2008-2014.

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