Outcome-Based Science, Technology, Engineering, and Mathematics Education: Innovative Practices

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As the engineering education shifts away from traditional methods and towards the outcomes-based mastery of science, technology, engineering and math topics, curriculum design must also shift to reflect this new priority.

Outcome-Based Science, Technology, Engineering, and Mathematics Education: Innovative Practices provides insights into initiatives that enhance student learning and contribute to improving the quality of undergraduate STEM education. These findings and experiences will promote excellence in undergraduate STEM education and inspire new thinking about STEM curriculum design.

Topics Covered:

• Academic/institutional Standards
• Outcomes-Based Education
• Engineering Education
• Issues on academic training and retraining
• Accreditation Issues
• Effective Assessment Design
• Instructional Design
• Online Assessment Tools
• STEM (Science, Technology, Engineering and Mathematics) Education
• Virtual Learning Environments

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