Connecting Mathematical Ideas: Middle School Video Cases to Support Teaching and Learning

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Description:

In math, like any subject, real learning takes place when students can connect what they already know to new ideas. In Connecting Mathematical Ideas, Jo Boaler and Cathy Humphreys offer a comprehensive way to improve your ability to help students in the middle grades link different mathematical ideas, representations, and strategies.

Video case studies from Humphrey's own classroom are included in the online resources. You'll see students bridging complex mathematical concepts with their prior knowledge, engaging in math talk, and investigating topics like representation, reasonableness, and proof. The online resources also include complete transcripts and study questions to stimulate professional learning. The accompanying book guides you through the online videos with in-depth commentary from Jo and Cathy that breaks down and analyzes the lesson footage from both a theoretical and a practical standpoint.

In addition to addressing the key content areas of middle school mathematics, Connecting Mathematical Ideas covers a broad range of frequently asked questions, such as:

* How can I organize productive class discussions?
* How do I ask questions that stimulate discussion and thought among my students?
* What's the most effective way to encourage reticent class members to speak up?
* What role should student errors play in my teaching?

Go inside real classrooms to solve your toughest teaching questions. Use the case studies and the wealth of professional support within Connecting Mathematical Ideas and find new ways to help your students connect with math.
Mathematics Teaching in the Middle School (MTMS) is an official peer-reviewed journal of the National Council of Teachers of Mathematics and is intended as a re...Â Mathematics Teaching in the Middle School (MTMS) is an official peer-reviewed journal of the National Council of Teachers of Mathematics and is intended as a resource for middle school students, teachers, and teacher educators. The focus of the journal is on intuitive, exploratory investigations that use informal reasoning to help students develop a strong conceptual basis that leads to greater mathematical abstraction. The journal's articles have won numerous awards, including honors from the Society of National Association Publications.