

YouCubed: Broadening the Conversation for Supporting Student Success in Mathematics

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YouCubed is a new, nonprofit organization with a mission to revolutionize the way mathematics is taught. Spearheaded by Stanford professor of mathematics education Jo Boaler, YouCubed provides free and affordable K–12 math resources and professional development for educators and parents.

Drawing on current research and best practices, YouCubed is a collaborative effort to empower learners to find the joy of mathematics through engaging in challenging tasks. The website offers short videos appropriate for a broad audience of students, parents and teachers. Examples include short interviews with Boaler describing current research about mathematics education in the United States, including innovations in brain research and how it relates to student understanding; other video clips capture research-proven pedagogical practices in action such as the use of math talks (Richardson 2011), allowing parents to see in practice what students may be experiencing in classrooms. These videos focus on the big ideas of teaching and learning mathematics and provide support for the kinds of tasks and instructional strategies used in standards-based classrooms.

Beyond laying the foundation of information, YouCubed offers challenging mathematical tasks spanning the entire K–12 curriculum. For example, at the elementary school level, a series of activities and tasks related to geometric reasoning and patterns is posed as an engaging, challenging and yet accessible sequence to help elementary school students grapple with mathematical concepts aligned to Common Core State Standards (CCSSM) (CCSSI 2010). The tasks offered in this section are constructed with classroom implementation in mind and provide pacing and necessary materials.

YouCubed's next section targets engagement in mathematics beyond the classroom through contextual

real-life examples. Providing contexts where mathematics is used in the real world has been found to be effective in terms of motivating students as well as allowing them to make important mathematical connections (Hand 2012). This section of YouCubed will provide a context for conversation about real-life mathematical connections for elementary school students.

YouCubed's last component is a resource section where parents can find ideas for working with students at home as well as Boaler's 12 steps for helping students learn mathematics, a document that includes tips on how to appropriately encourage students to stay motivated in mathematics as well as simple pedagogical strategies to use at home in helping students work through math homework.

Potentially its most significant attribute, YouCubed focuses on broadening the conversation about mathematical understanding beyond the walls of the classroom. The implementation of CCSSM across much of the nation has forced a shift in the way parents and teachers converse about mathematics and how to help students succeed. Such resources as YouCubed can be instrumental in fostering the ongoing conversation by laying a foundation of knowledge to help parents understand the how and why of CCSSM objectives.

Knowledge is power. By building the knowledge base, all stakeholders can be successful in this continuing journey.

References

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