

PRODUCT reviews

Adaptive Curriculum Math

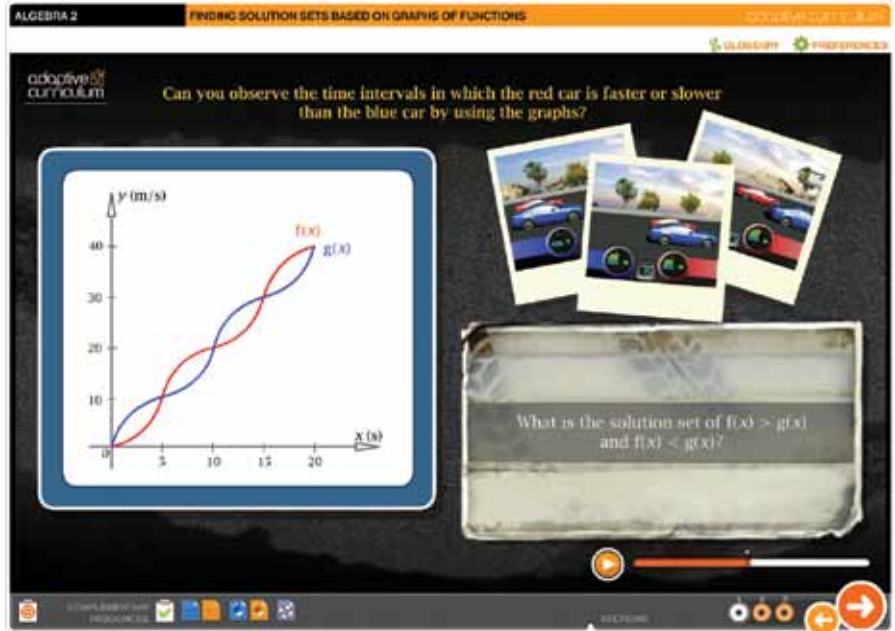
By Julie Leckman

The new Common Core State Standards in math emphasize depth over breadth in an effort to help students move from simple memorization to deep, meaningful learning. Even though there is a glut of educational programs and software available today, few provide the content and resources needed to help students master the more difficult math concepts. Adaptive Curriculum Math (AC Math) scores highly as a tool to help teachers turn surface learners into deep conceptual learners.

Strong and Accurate Content

My first exposure to AC Math was in a session presented by former ISTE President Helen Padgett at an Arizona Technology in Education Association conference in Flagstaff, Arizona, USA. Mathematics specialists from Arizona State University designed the lessons and activity objects (interactive lessons) in this program.

Not only is their content accurate, but the designers are acutely aware of how to structure a lesson to engage students. The lessons approach new content at the students' intuitive level of understanding, yet designers have structured them to contain focused exploration and problem solving so that students achieve a high level of understanding. The learning activities answer student questions such as "Why do we have to learn this?" by anchoring learning in real-life problems and interactive manipulatives.



AC Math allows students to relate the context of graphic representations and formal mathematics to real-life events.

Students engage in practical use, but not at the expense of conventional mathematics structures and language.

Alignments

AC Math takes the guesswork out of which lessons apply to what the teacher may be teaching. Creators aligned and catalogued all the activity objects to the Common Core State Standards and individual state standards. What's more, every interactive lesson embeds mathematical practice standards. An added benefit for teachers is that lessons align to some of the more commonly used mathematics texts, providing a strong supplement to textbook activities.

Engagement

AC Math engages my students with compelling animations, graphics, interactive simulations, and content presented through clever dialogues and real-life scenarios. For example, students act as detectives and use mathematical combinations to determine all the possible disguises of the criminal "Manny Many Faces." In another activity, students construct linear functions from costs before and after discounts at a pizzeria. Students also engage in simulations, such as using a juice machine with a cylindrical collection container and cone-shaped juice glasses to derive the relationship and formula for the volume of a cone. This active learning approach really



AC Math provides teacher resources to integrate science and math that can stand alone or be incorporated into STEM lessons.

motivates students to explore, make hypotheses, manipulate items, and see the impacts of their decisions.

Ease of Use

AC Math is a cloud program that uses everyday plug-ins, such as Java and Flash. No installations are required. The lessons load quickly on student netbooks.

Another advantage is that almost all of the interactive lessons are offered in Spanish. This includes student sheets and assessments as well as the lessons.

Accountability, Assessment, and Data Collection

The makers of AC Math clearly understand the need for formative

assessments as well as students' need to assess their understanding. It includes a lot of practice for students and provides immediate feedback. It also gives students the ability to control the speed at which they progress through the lesson and the ability to revisit any part of the lesson to clarify any misconceptions. AC Math also informs the teacher of students' progress as they advance through each lesson. Every lesson contains a short formative assessment directly related to the lesson. Quizzes scaffold questions from the recall to the transfer level and are automatically graded and recorded for the teacher in real time.

Teacher Controls

AC Math provides tools for teachers to orchestrate lessons. They can customize a lesson in the planning area by adding handouts, links, or just about any other resource they choose. Teachers can then assign the lesson to all students or select groups of students. They have the flexibility to teach to a whole group or to use a section or activity to supplement a lesson. Teachers can also assign part or all of a lesson for individual learning, leaving the teacher free to work with students who may need more support.

Pricing

Adaptive Curriculum sells annual subscriptions to AC Math on a per-student basis. The fee varies depending on the volume of the purchase, the length of the term (one to three years), and promotional pricing in place at the time you buy. On average, licensing ranges from \$12 to \$18 for a single access. The company offers a variety of math and science packages for middle and high school. Bundled discounts are available for multiple-subject purchases.

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www.adaptivecurriculum.com
\$12–\$18 per student



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