March 2009

EDCompass newsletter

News and resources for educators using SMART products

education.smarttech.com

IN THIS ISSUE

A NOTE FROM THE EDITOR

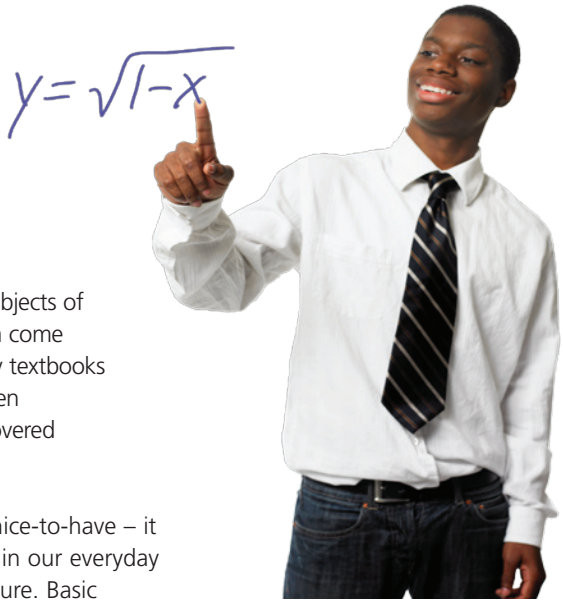
Welcome to the March issue of *EDCompass*™ newsletter!

Technology has become an essential learning tool in the 21st-century classroom. At SMART, we continually strive to stay at the forefront by producing innovative, easy-to-use products that help teachers teach and students excel. This issue of the newsletter focuses on the math classroom. We hope you'll be inspired by the many different ways educators are using technology to create memorable learning moments in their classrooms. This month, you can download math tools and resources on page 2 and find out how teachers are building creative thinking skills with their high school math students in the feature article. Plus, check out the product spotlight on SMART Notebook Math to learn about all the exciting math features that will soon be available to you.

As always, if you have any comments about the newsletter or any of the information featured in this issue, we'd love to hear from you. Please e-mail your feedback to education@smarttech.com.

NANCY'S NOTES

Numb3rs and numbers



I have to admit that I am a serious *Numb3rs* fan and I catch the show whenever I can. Solving a crime is always interesting, but it's the use of math in ways I would never imagine that keeps me coming back (and even watching the same episode more than once).

Algebra and geometry were favorite subjects of mine in school. My teacher made them come alive. I loved to do every problem in my textbooks until I deeply understood concepts, often completing them before the teacher covered the topic in class.

Today mathematical literacy is not a nice-to-have – it is a must-have. Math is all around us in our everyday lives, and it will be more so in the future. Basic existence demands a level of mathematical competence.

Beyond that, many of the problems facing the world are going to be solved, in whole or in part, through the application of mathematical principles. Life will get better because of math and the products that its application can provide. To get those math masters in the future, we need to graduate large numbers of students with an interest and competence in math.

Just how do we turn our young people on to such a critical subject? We all know that children do their best when they are engaged and enjoying activities, and teachers thrive on seeing their students succeed.

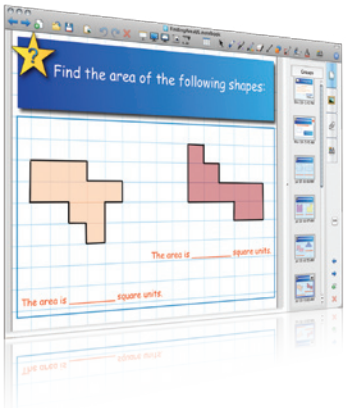
At SMART, we're doing our part by focusing on math functionality within our products and resources. In this issue, you'll learn about the range of features and materials that we already provide and the new things that are coming soon. We think you'll like what you see.

Numb3rs is wonderful, but a love of and fluency with numbers is what we truly need from education today.

Nancy Knowlton **is the CEO of SMART Technologies.**

CLASSROOM CONTENT

SMART Notebook lesson activities



Find a comprehensive database of professionally developed K–12 lesson activities on our education website. The lessons are correlated to local curriculum standards and created by classroom teachers or SMART's team of curriculum resource developers.

Try one of the following SMART Notebook lesson activities during your next math class.

Scrambled Easter Eggs
In keeping with the season, K–3 students can move Easter eggs into sequential order, counting by 2s, 5s and 10s.

Finding Area
Students in grades 4–6 can learn how to find the area of various shapes using manipulative blocks.

SMART products transform math homework review

See how math teacher Giancarlo Brotto, a SMART education consultant based in Toronto, Ontario, uses SMART Notebook software, the SMART Document Camera and the Senteo™ interactive response system to take up homework in his ninth-grade math class.

In this nine-minute video tutorial on SMART's YouTube channel, Giancarlo shows how SMART products help him clarify misconceptions about the previous day's work and ensure his lesson has been understood. Watch the video.

NEWS

Visit SMART at the NCTM 2009 Annual Meeting & Exposition

April 22–25, 2009
Walter E. Washington Convention Center
Washington, DC
SMART booth 849

The National Council of Teachers of Mathematics (NCTM) is hosting its annual conference, April 22–25, in Washington, DC. If you're attending, drop by and visit us at booth 849. You can watch a series of rotating math presentations throughout each day of the show, meet SMART staff and learn new tips that will help you enrich your lessons.

We're also hosting a one-hour math workshop on Friday, April 24, from 4:00 to 5:00 p.m. in room 144A of the Walter E. Washington Convention Center. In this session, titled Using SMART to Empower Students in the Mathematics Classroom, participants will get a glimpse into how SMART's education products and resources integrate into the K–12 math curriculum. Space is limited, so arrive early to secure your spot.

Download SMART math tools

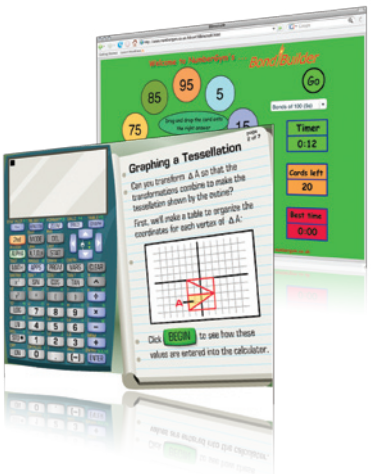
SMART has hundreds of free math tools and resources for all grade levels on our education website – and we're always adding more. For your convenience, we've compiled them into one downloadable package, which includes the following resources:

- 334 SMART Notebook lesson activities
- 284 learning objects from the SMART Notebook Gallery
- 166 Senteo question sets
- 8 SMART Ideas™ lesson activities

Download these resources at www.smarttech.com/mathcontent.

SMART-accredited software

SMART's Software Accreditation Program includes more than 300 multimedia content and software titles from over 90 companies. The program recognizes titles based on their level of compatibility with SMART Board™ interactive whiteboards and Sympodium™ interactive pen displays.



Of these titles, 65 are designed for math teachers. SMART-accredited math software and content is available from companies such as Glencoe/McGraw-Hill, Key Curriculum Press, Riverdeep, HeyMath!, Plato Learning, Ignite! Learning, StarrMatica, Tom Snyder Productions® and NumberGym. See a full list of math titles.

NEWS

Easy to use keeps getting easier

Since SMART products are designed to be at the center of dynamic learning environments, it's important for them to be effective, versatile and easy to use. SMART Notebook software, the Pen Tray and our new Touch Recognition feature all help to make SMART Board interactive whiteboards reliable and intuitive. That's the main reason educators have made the SMART Board the most widely used interactive whiteboard in the world.

SMART makes it easy for you to be extraordinary in the classroom. In this six-minute video, watch how teachers are creating inspiring learning environments and achieving incredible results.

Visit the education solutions section of SMART's website for more information.

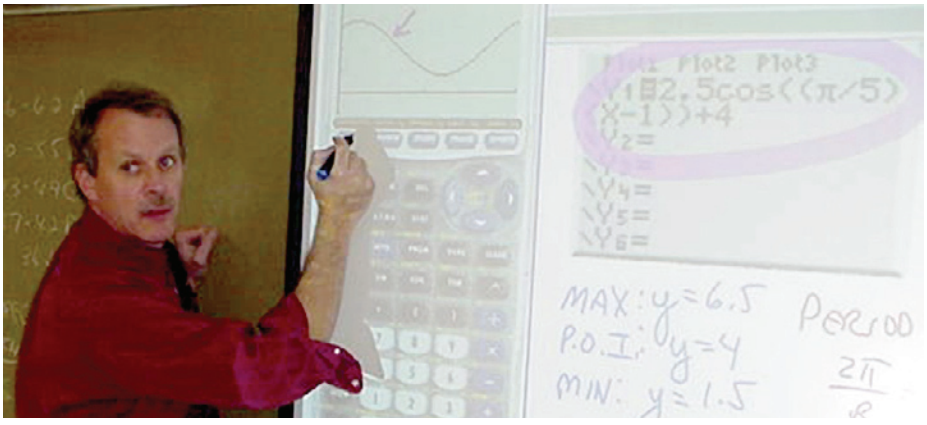
Take the SMART Classroom Tour

What if you could explore three different approaches to learning – whole class, small group and individual – and see how SMART products can be used in each scenario to heighten students' understanding? The SMART Classroom Tour will help you do just that.

This interactive online tool shows you how our products work together in real-life classrooms. If you need information about a product, you can click on it to read more or watch a video to see it in action. Take the SMART Classroom Tour, and see how SMART products can help make learning extraordinary.

FEATURE ARTICLE

Practice makes perfect



Math. To some, the very word conjures anxiety and angst. To others, it's music. No matter which side of the spectrum you fall, it can't be denied that high school mathematics instruction can have a significant impact on the future of today's students. Read the full article.

CLASSROOM CONTENT

Senteo question sets

Find a database of Senteo question sets on our education website. Each set includes 10 questions that are correlated to state and provincial curriculum standards and are compatible with a matching SMART-created lesson activity on the same topic.

Try one of the following Senteo question sets in your next math class.

Bar Graphs
K–3 students can explore and test their knowledge of bar graphs.

Measurement of Temperature
Grade 4 and 5 students can test their ability to measure temperature.

Parallel and Perpendicular Lines
Grade 9 and 10 students can test their ability to understand parallel and perpendicular lines.

"Students cannot help but be engaged in my lessons on the SMART Board. They know that I will ask them to get up and present at any given moment, using an online graphing calculator or virtual tiles. Students have learned that math class is no longer a delivery of unrelated facts."

Lili Bastianelli
Math teacher
St. Pius X High School
Ottawa, Ontario

CLASSROOM CONTENT

Teacher-created lesson activities

A lesson in service

We're holding a lesson activity contest for U.S. residents that speaks to the value of social responsibility. You can submit your best SMART Notebook lesson activities that capture the spirit of service and inspire students to help shape their country's future. Then tell us how your students took action – we'd like to hear about the people they helped. We'll post the lessons of the finalists on our website for other teachers to use to motivate students to volunteer, mentor and share.

The best entries in three grade-level categories (K–5, 6–8, 9–12) will receive a classroom technology package worth more than US$12,000. The deadline for submissions is April 3, 2009. Visit our education website for contest details.

Content creation seminar

Are you a teacher in the Montreal area? If so, you could be selected to attend a three-day seminar hosted by SMART, March 20, 23 and 24. You'll learn how to create highly engaging and interactive lesson activities that align with your state's curriculum standards. Participants will be eligible to receive technology credits and a certificate. This seminar will be conducted in French. Learn more and apply now!

NEWS

Connections camp – call for applications

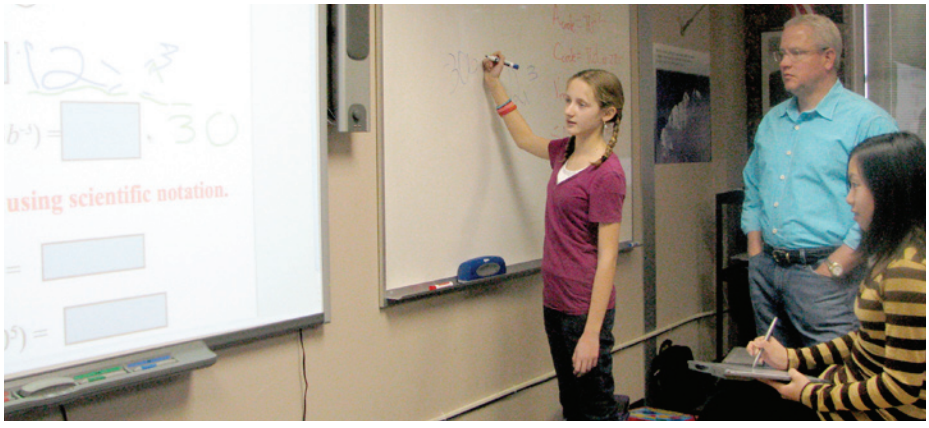
The SMARTer Kids™ Foundation of Canada is accepting applications for the 2009–2010 session of Connections, a fully funded collaborative learning program for sixth-grade teachers and their students.

Eight classes will be selected and equipped with leading-edge classroom technology to undertake collaborative projects between schools. Sixth-grade teachers from schools in the United States and Canada are eligible to apply. Applications must be received by midnight MST on March 31, 2009.

If you didn't catch it in last month's newsletter, you can read the feature article celebrating the last 10 years of the Connections program. Find out what teachers and students who participated in past years have to say about their experiences and the relationships they forged that are still going strong. Apply now!

SMART SHOWCASE SCHOOL PROFILE

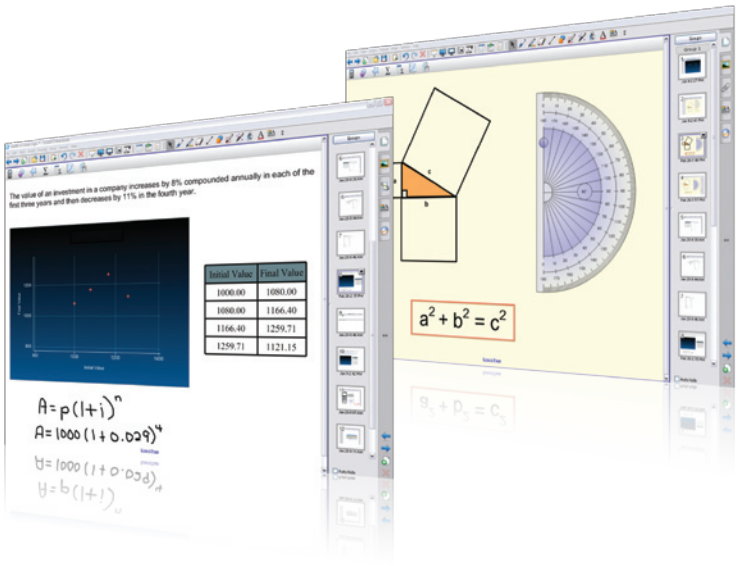
Making math interactive at Cresthill Middle School



When Gregg Robinson poses an algebra question to his students, he knows that they can start solving it right away on a large, dynamic surface. That's because he and his fellow math teachers at Cresthill Middle School in Highlands Ranch, Colorado, use SMART Board interactive whiteboards to engage students and encourage them to work collaboratively.

"The key in our math classes is to engage everybody, and the SMART Board is one tool that gets students engaged," says Robinson. "The ability to touch an object, manipulate an object, flip an object, group different objects – it's just critical." Read the full article.

Multiply student engagement with SMART Notebook Math



If you've ever celebrated International Pi Day, worn a mathlete T-shirt or if you just love teaching algebra and geometry, then you'll probably be excited to hear SMART is adding new tools to SMART Notebook software – specifically for math lessons!

Created for middle and high school math classrooms, SMART Notebook Math adds interactive math tools and features to our popular SMART Notebook software, helping you make lessons more interactive, visual and easy to understand.

Interactivity and flexibility – the right equation

We developed SMART Notebook Math because educators told us they want to make math more engaging, so that ultimately their students have the necessary skills to succeed in a competitive job market. By giving math teachers a flexible set of interactive tools that are integrated directly into SMART Notebook, we wanted to help them more effectively teach complex concepts in areas such as algebra, statistics, geometry and calculus.

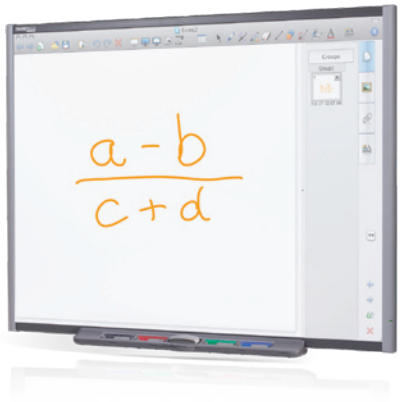
That's what SMART Notebook Math delivers. You can create, solve and graph math problems within the SMART Notebook interface, without having to import symbols or switch between applications.

Available for beta testing in June, SMART Notebook Math provides you with built-in features, such as an equation editor, a custom graph builder and measurement tools. We've also added mathematical symbol recognition to SMART Notebook's handwriting recognition feature, enhanced the ruler, compass and protractors, and created more shapes that you can easily manipulate.

So what's the sum of this equation? SMART Notebook Math helps you teach mathematics to students with varied learning styles. You can display a complex concept in multiple ways – graph it, present it as a written equation or create a table. The software's new tools and features enable you to engage students, increase understanding and easily apply concepts to different areas of mathematics.

Factor interactivity into your math lessons – sign up for the beta!

Fast facts



- **Made for math** – SMART Notebook Math helps you teach concepts in key mathematical areas, such as algebra, geometry, measurement, data analysis, probability, problem solving and systematic reasoning
- **Support for your investment** – SMART Notebook Math is ideal for schools that use SMART Board interactive whiteboards
- **Easy to use** – Because these tools are integrated into SMART Notebook software, you and your students can work within a familiar interface
- **Interactive** – SMART Notebook Math's dynamic tools help to make your lessons more visual, hands-on and dynamic
- **Streamlined** – SMART Notebook Math enables you to create and explore math concepts without having to switch applications or import symbols
- **Flexible** – You can support multiple learning styles by creating graphs, tables and equations to represent complex concepts
- **Versatile** – SMART Notebook Math has many interactive features to help you teach your students, including an equation editor, a custom graph builder and measurement tools. You'll also be able to dynamically graph from equations or tables of value.

Math by the numbers

There are over **237,500** K–12 math teachers in the United States. Of that number, over **190,000** teach middle and high school math.

In **1999**, the month of April was designated Mathematics Awareness Month in the United States. From **1986** to **1999**, mathematics awareness was honored as a week, rather than a month.

March 14 is International Pi Day and, this year, is Albert Einstein's **130th** birthday.

According to the U.S. Bureau for Labor, between 2004 and 2014 a growth in math and math-related careers is expected:

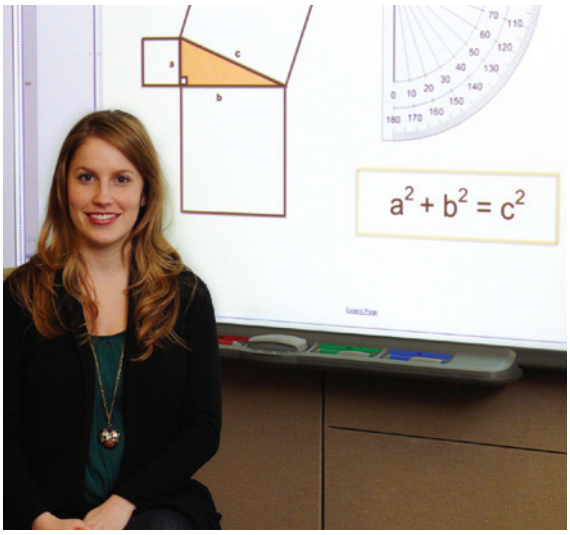
- 31 percent growth in technology careers
- 12 percent growth in engineering careers
- 10 percent growth in mathematical-science careers

Math skills are required for many professions, including these **six**: animator, urban designer, forensic analyst, air traffic controller, population ecologist and climate analyst.

Up next

Watch for the next issue of *EDCompass* newsletter, where you can learn how educators are creating learner-centric environments in their classrooms. You'll also read about SMART Classroom Suite, a new interactive learning software suite that integrates lesson creation and delivery, student authoring and file management, classroom management, and student assessment.

Ask Erica



Erica Arnoldin is the product manager for SMART Notebook Math. We asked her why there's a need for math-specific tools in SMART Notebook software.

EDCompass: Why did SMART create SMART Notebook Math?

Erica: SMART Board interactive whiteboards have always been popular in the math classroom. Over the years, we've heard from math teachers about what would make their experience with the SMART Board even better. Mathematics is a subject that requires certain niche tools, and any tool that an educator can use to increase students' comprehension is a big win.

EDCompass: Why is it specifically designed for middle and high school math teachers?

Erica: We found that the majority of our math requests were coming from educators at the middle and high school level. Most of the tools that educators felt were missing were actually only relevant in the secondary classroom, where the math is more advanced.

EDCompass: What impact do you think SMART Notebook Math will have on math teachers and students?

Erica: I think SMART Notebook Math will make a big difference in student comprehension. Educators will easily be able to show the same mathematical concept in a variety of ways. There will be so many options right at the tip of their fingers. Imagine writing an expression in SMART Notebook and then having the option to solve, plot or recognize that expression right on the spot. Educators will also be able to very quickly show connections between tables and graphs that update as you add points to either. Normally, an educator would have to launch several applications to achieve the same effect, which isn't always an effective use of class time.

EDCompass: What features do you think will be popular with math teachers?

Erica: Well, I know they'll love the equation editor. And overall I think that they will enjoy the speed and ease at which you can now access and use math tools in SMART Notebook. Being able to have graphs, number lines and expressions all on the same page as your class notes is a great feature when it comes to sharing the files with students for review.

EDCompass: What kind of feedback do you hope to get from the beta testing?

Erica: We really value the feedback we receive from our beta trials. We want to know just how easy it is for teachers to use the features we've designed. Our goal is to make SMART Notebook Math so intuitive that the learning curve is very low. If during a beta trial we get a lot of comments on the same feature, then we know we haven't hit the mark yet.