October 2009

EDCompass newsletter

News and resources for educators using SMART products

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IN THIS ISSUE

A NOTE FROM THE EDITOR

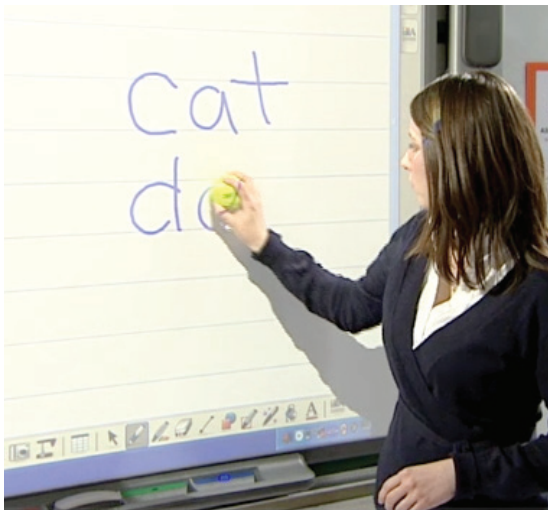
Welcome to the October issue of *EDCompass*™ newsletter!

No two people are more important in the life of a child than parent and teacher – especially for the child with special needs. Whether you are teaching special education classes, assisting an exceptional child or parenting a child with special needs, this edition of the newsletter will be of interest to you. Be sure to read the feature article on page 3, where two teachers share their stories of teaching children with autism spectrum disorders. Also check out the SMART Showcase School profile on page 4, which explains how teachers at Isobel Mair School, SMART's first Showcase School in the UK, use SMART products to differentiate and individualize instruction for students with a wide range of needs.

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 newsletters@smarttech.com.

NANCY'S NOTES

Including Everyone



There is a science behind product development and design. Not only do hardware and software developers need to make products work technically, they also have to ensure that people are able to use them effectively.

Developers spend years in university studying the intricacies of product development. They learn about topics such as user interfaces, languages, accepted practices and design frameworks.

At SMART, our developers examine what our customers do in their environments and then work hard to design products that improve these activities. Our objective is to create intuitive and easy-to-use products that enable great experiences for our customers.

In the real world, products must work in the hands of users – all users. Children with special needs receive particular attention in our development work, as we recognize they are present in classrooms in record numbers. Whether these learners' needs are physical, cognitive or otherwise, we aim to develop hardware and software products that not just include them, but delight them.

Allowing touch through fingers, a ball or a pointer and making buttons large and visible are just some of the design elements we consider as we develop hardware and software products. These seemingly simple choices have meant that our interactive whiteboards, for example, have been used extensively in classrooms with children with hearing impairments and children who have challenges holding a pen. They work well for all children in today's diverse classrooms.

This issue of *EDCompass* newsletter is focused on special needs and how our products specifically respond to them. I hope you find the information you need to help you meet these needs in your classroom.

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

CLASSROOM CONTENT

SMART Notebook Lesson Activities

Find a comprehensive database of K–12 lesson activities on the SMART Exchange. The activities 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 language arts, geography or science class. This issue, we've included ones for Halloween and Thanksgiving!

Halloween Poems

K–3 language arts students can use textual clues to match pictures with the appropriate Halloween-related text.

Thanksgiving Day Word Fun

Language arts students in grades 3–5 can practice their spelling skills using Thanksgiving vocabulary words.

Continents and Oceans

Geography students in grades 7–9 can learn about the different continents and oceans using a map with hot spots.

Structure of the Digestive System

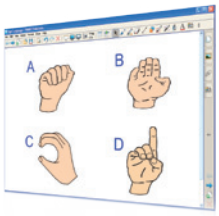
Science students in grades 10 and 11 can learn about the digestive system by labeling detailed diagrams.

NEWS

Special Needs Content

In last month's issue we told you about the new SMART Exchange, your complete education destination. On this website you can find a wealth of free, ready-to-use teaching content – check out the sidebars on this page and page 3 for some examples – and a vibrant educator community.

Here are a few images and lesson activities that are particularly useful for teaching students with special needs.



Sign language and facial expression images

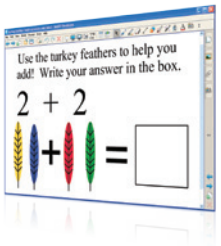
Students can learn the alphabet in sign language and see visual representations of various facial expressions.

Gingerbread Man

Created by Jennifer Frazier, occupational therapist, and Leslie Stevens, preschool special needs teacher, this lesson activity allows students to follow the gingerbread man with their finger, a tennis ball or pen while they learn about sequencing and identifying and matching shapes.

Turkey Math

Created by Teresa Crowson, occupational therapist, this lesson activity helps students learn kindergarten-level addition, subtraction, comparison and graphing concepts. And because the activity's larger than life, colorful images are fun and easy to work with, even prekindergarten students with special needs can enjoy it.



The activities above are just some examples of the great content you'll find on the SMART Exchange. From the website, you can start searching for classroom-ready materials right away. Once you've tried it out, tell us how we're doing so we can keep improving.

Take our poll

Can you find relevant content on the SMART Exchange?

Vote now

Fill Out Our Reader Survey to Win

Last issue, we told you how you can let us know what you think of the newsletter. If you complete our reader survey, you'll be entered to win a SMART Response interactive response system, complete with 32 handheld remotes, and a user license for SMART Notebook Math Tools. Your feedback will help us ensure we're providing relevant and valuable information that helps you and your peers use SMART products in innovative ways.

Complete the survey and enter the draw for your chance to win. The survey closes on October 30, 2009, and the winners will be announced in the November issue.

NEWS

Special Needs Resources

At SMART, we've long been interested in how we can assist teachers in engaging students with special needs and helping them succeed. Our website offers information and research on the positive effects that interactive whiteboards have on these students. We selected just a few of those resources to share with you here:

SMART Technologies Research Project at Dr. Gordon Townsend School
This research paper, prepared by Michelle Speight and Curtis Slater of Dr. Gordon Townsend School at the Alberta Children's Hospital in Calgary, Canada, investigates the impact of using a SMART Board™ interactive whiteboard in an environment where many learners have physical or mental difficulties. Students, parents and teachers at the school participated in the study, which found that all three groups felt the SMART Board could play an important role in unique learning environments like the one found at Dr. Gordon Townsend School. Read the study.

The Effects of SMART Board Interactive Whiteboards on High School Students with Special Needs in a Functional Math Class
This comparative analysis, prepared by Meredith L. Zirkle from Eastern Mennonite University in Harrisonburg, Virginia, explores the impact a SMART Board interactive whiteboard had on the achievement of 11 students with special needs in a functional mathematics class. The 24-week study consisted of four periods of alternately using and withholding the SMART Board. She found that grades in the class increased 4.5 points in the first six weeks. In the second six weeks, students with learning disabilities saw their grades increase by 5.5 points, and students with emotional disabilities saw an increase of 29.5 points. Read the study.

Creating Classrooms for Everyone – How interactive whiteboards support universal design for learning
One of SMART's recent white papers outlines how interactive whiteboards support universal design for learning. It includes a seven-step checklist to help educators evaluate which interactive whiteboards will best enable them to address differentiated learning and accommodate learners with special needs. Read the white paper.

FEATURE ARTICLE

Oh-My-Goodness Moments

Dr. Stephen Shore, a special needs teacher who has Asperger's syndrome, once said at a conference, "If you've met one person with autism, you've met one person with autism." This quotation rings especially true for teachers of students with autism spectrum disorders (ASDs) – responding to the individual needs of these students can be daunting. But while these teachers mention the challenges they face when teaching students with ASDs, they are more eager to talk about the rewards they reap from these relationships. Read the full article.

CLASSROOM CONTENT

SMART Response Question Sets

Find a database of SMART Response question sets on the SMART Exchange. Each set includes 10 questions that are correlated to state and provincial curriculum standards.

Try one of the following SMART Response question sets in your next science, math, language arts and social studies class.

Natural and Man-made Substances
K–3 science students can test their ability to identify which substances are natural and which are man-made.

Types of Lines
Math students in grades 4–6 can test their ability to identify different types of lines.

The Rock Cycle
Science students in grades 7–9 can test their knowledge of different types of rocks and their formation.

Causes of World War I
Social studies students in grades 10–12 can test their knowledge of what caused the First World War.

CLASSROOM CONTENT

SMART Table Activities

If you're using the SMART Table in your special needs or K–3 classroom, check out the growing number of SMART Table activities on our education website. Each activity corresponds to a SMART Notebook lesson activity or SMART Response question set. You can use SMART Table activities with small groups to complement whole-class and individual learning experiences.

Here are a few science, social studies, math and language arts activities to get you started.

Animal Needs

In this science activity, students can compare the various needs of animals with the needs of humans.

My School

In this social studies activity, students can learn about the different roles of people who work in schools and about the various parts of a school.

Multiplication

In this math activity, students can practice their multiplication skills.

Alphabet

In this language arts activity, students can learn the letters of the alphabet.

NEWS

Attend a Webinar on Universal Design for Learning

On December 8, SMART is offering a webinar you won't want to miss, especially if you work with students with special needs! Creating Classrooms for Everyone: How Interactive Technology Supports Universal Design for Learning will explore the ways classroom technology supports universal design, increases student engagement, reduces barriers for learners with special needs and enhances learning for all students.

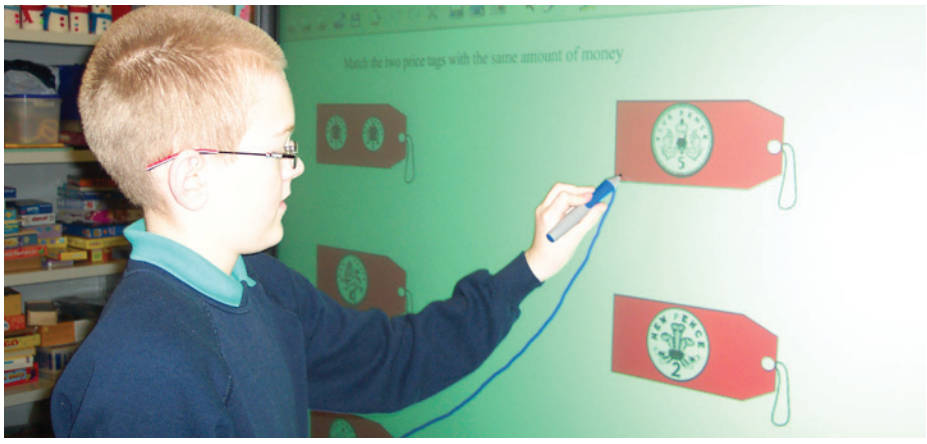
Beginning at 3:00 p.m. ET, this 60-minute webinar includes an expert panel discussion followed by an online Q & A session. This webinar is the third in our new webinar series, which launches tomorrow. Though the series is designed for administrators and technology directors, teachers will find much in these sessions relevant to their practice. If you take part in any of the webinars in this series, you will receive front-of-the-line access to SMART virtual trade shows and the chance to register early for SMART's popular Learning Matters seminar at FETC in January 2010. Check out the other topics that will be covered this year:

- Improving Assessment with Technology: Instant Insight into Your Students' Learning – Wednesday, October 14
- Digital Content for Digital Natives: Engaging Today's Tech-Savvy Students – Tuesday, November 10

Find registration information and more details on the first two webinars at www.smarttech.com/SMARTWebinarEC. And watch for more webinars to be added in the new year.

SMART SHOWCASE SCHOOL PROFILE

Technology Belongs to the Students at Isobel Mair



"At our school, using technology is not an option – it's an expectation," says Mari Wallace, head teacher of Isobel Mair School, a 55-educator, 70-student facility in Glasgow, Scotland. The school's students are between the ages of 5 and 18 and have a wide range of special needs. Read the full article.

SMART Response LE – Instant Insight for Special Education

You'll see stars (and circles, squares and triangles) when you use SMART Response LE with your students with special needs. That's because you'll be getting instant insight into their comprehension of lessons.

SMART Response LE is our newest interactive response system. It combines unique remotes, which feature pictorial buttons and large LCD screens, with our interactive, easy-to-use assessment software.

The system is specifically designed for learners in early education and learners with special needs. SMART Response LE engages students in lessons while enabling them to instantly share their understanding with you. With this system, you can be confident about what your students are learning.

Learning takes shape

SMART Response LE is integrated with award-winning SMART Notebook software. To get started, simply create multiple-choice, true-or-false or yes-or-no questions in SMART Notebook. Each answer automatically corresponds to one of the five big and colorful buttons on the students' handheld remotes – a circle, triangle, square, star or diamond.

Once you've explained the question to your class, each student answers by pressing the symbol that corresponds with what he or she believes to be the correct answer. Students of any reading ability or age, and students who struggle with fine motor skills, can use SMART Response LE to complete quizzes because the remotes are visual, durable and easy to hold.

When your class has answered the questions, the assessment software creates a pie or bar graph that enables you and your students to see if the majority of answers are correct or if further review is required. The instant feedback on quizzes is motivating to students, and the colorful remotes make learning fun. You can then create an assessment report to determine what has been learned and who needs extra help.

And when you combine SMART Response LE with a SMART Board interactive whiteboard, you'll create a large focal point for learning that encourages engagement and participation.

Learn more about SMART Response LE.

Fast Facts

- **Visual** – Each SMART Response LE remote has big, pictorial buttons and a large LCD screen. The assessment software enables you to create colorful quizzes and tests, and you can incorporate images and learning objects from the SMART Notebook Gallery into your files.
- **Easy to use** – Students of all ages, reading abilities or degrees of fine motor development can use SMART Response LE because the remotes are colorful, easy to operate and lightweight
- **Instant** – Once students respond to questions using their remotes, the assessment software summarizes the results in a pie or bar graph
- **Versatile** – You can use SMART Response LE anytime – plan a test in advance or spontaneously pose questions during a lesson to gauge understanding
- **Works with SMART Notebook** – The system is seamlessly integrated with SMART Notebook, which provides you with one software application for curriculum development, lesson delivery and evaluation
- **Offers insight** – Create assessment reports that are as simple or as detailed as you need – from pie charts showing individual student achievement to bar graphs comparing class performance

SMART Response LE in the Classroom

Discover how SMART Response LE helps students express themselves. Watch the video.

What teachers say

"Teachers need to muster every possible resource to allow our mentally challenged students to reach their fullest potential. SMART Response LE is an example of the type of resource that can be put to use in the special education classroom, allowing our students to achieve a higher level of engagement. In addition, it is a tool to improve the effectiveness and efficiency of our staff as we progress in achieving our curriculum standards."

Linda Rush
Technology Integration Specialist
Notre Dame School
Catholic Diocese of Dallas
Dallas, Texas

Up Next

In the next issue of *EDCompass* newsletter, we're taking a look at early education. You'll read best practices and success stories from primary school teachers who are excited about the positive impact interactive technology is having on their young students.

Ask Lisa

We asked Lisa deRoy, one of SMART's senior education consultants, about how SMART products support learners with special needs. Lisa formerly taught K–8 students with special needs in both self-contained and mainstream classrooms, and she has also worked on the Minnesota Department of Education's pilot study of Universal Design for Learning (UDL) and SMART Board interactive whiteboards.

EDCompass How do SMART products create inclusive learning environments?

Lisa SMART incorporates UDL principles into the design of each product. This allows teachers to easily implement the appropriate accommodations and adaptations in student IEPs [individual education programs], enabling all students to access the curriculum and participate in the least restrictive environment. Our products are designed to accommodate a wide range of individual abilities, are intuitive to use and have shapes and sizes that allow users to approach, reach and manipulate content, regardless of their height or mobility.

EDCompass What impact do SMART products have on learners with special needs?

Lisa There are so many ways SMART products enable students with special needs to connect to learning – here are just a few:

- Teachers can sync the SMART Table to the SMART Board interactive whiteboard, so students who are visually impaired can see what is being taught from a large, highly visual screen near their seat
- Students who struggle with organization can easily keep track of their assignments using SMART Notebook SE (Student Edition). The software includes a digital binder with color-coded flags that enable students to track assignments and dates in a number of ways.
- Students who have difficulty with expressive behavior can learn about human facial expressions by participating in kinesthetic, visual and auditory activities on the SMART Board and SMART Table, or can show understanding using SMART Response LE

EDCompass How do SMART products support teachers as they create and deliver lessons to students with special needs?

Lisa Learning is an action verb. SMART products naturally encourage activity, interaction and engagement. They are flexible and intuitive, enabling teachers to easily tailor instruction on the fly for student-centered learning. And SMART products give them the power to reach tactile, visual and auditory learners all at once, through the development of one task.