



By Wendy McMahon

Author, educator and differentiation expert Carol Tomlinson defines differentiation as tailoring instruction to meet individual needs. Whether teachers differentiate content, process, products, or the learning environment, the use of ongoing assessment and flexible grouping makes this a successful approach to instruction.

Teacher April Giddens applies this definition in her classroom but offers her own, more emphatic, definition, as she says, "Differentiation is simply fantastic!"

On any given day you'll find the students in Giddens' sixth-grade language arts classes at Natchitoches Magnet School in Natchitoches, Louisiana, writing songs and poems, creating skits and even developing interactive games to play with their classmates on the SMART Board interactive whiteboard – all in the name of differentiating instruction to help students succeed in the classroom.

Giddens, the 2012 Louisiana Teacher of the Year, has been employing differentiation as a teaching strategy for her entire 16-year teaching career. "I've always used differentiation in my classroom.



If you have a child who's not getting it, you have to constantly look for different ways to reach them."

And, for Giddens, the most important differentiation tools in her classroom are her SMART Board 885ix interactive whiteboard system and her SMART Response interactive response system "My SMART products have been critical in differentiating instruction. I use them so often," she says.

The ways that Giddens uses her SMART Board interactive whiteboard and SMART Response interactive response system to differentiate learning are seemingly endless. From embedding videos and images in SMART Notebook lesson activities for auditory and visual learners, to providing opportunities for kinesthetic, tactile learners to touch the interactive whiteboard and manipulate images or play interactive learning games found on the SMART Exchange website.

At the beginning of each school year, Giddens surveys students to discover their learning styles.

"I ask, 'Do you like to watch things, do you like to listen to things, do you like to actually do things and create things, do you like to manipulate things?' It gives me a picture of the class that I have," she explains.

Most years, over 90 percent of her students indicate a preference for actually "doing" things in the classroom – which can prove difficult in a language arts class which most people associate with sitting down and writing.

But Giddens gives students plenty of opportunities to learn by doing. For example, students manipulate images on the interactive whiteboard to reflect the sequence of a story they are reading, and they come to the interactive whiteboard to capture brainstorming ideas or complete Venn diagrams together using the multi-touch functionality of the SMART Board 885ix interactive whiteboard. In fact, students use the interactive whiteboard so often they know how to do everything from embed videos and insert pictures to inserting voice clips and sounds.



As a result of her differentiation efforts Giddens says she sees an increase in her students' learning ability and skill levels as well as performance each year. "I can definitely see the benefits because my test scores this year and each year have been very good."

She also sees an increase in students' self-confidence and self esteem as a result of their classroom success. "They feel like I've met them where they are and I've taken them beyond where they thought they could be. Because the technology allows me to give them customized instruction that's tailored to their specific needs," says Giddens.

Although the number of teachers, like Giddens, who differentiate instruction in their classrooms is growing, Clare Kilbane, an Associate Professor in the Teacher Education Department at Otterbein University in Westerville, Ohio, says differentiation is still in the early stages of adoption in education.

Kilbane, who teaches about differentiation to graduate students, has written about differentiation and consults with schools at the local and national levels on technology integration and differentiation. In much of her work Kilbane helps educators learn how to use technology such as the SMART Board interactive whiteboard to support the goals and practices of differentiated instruction.

"Technology can make differentiation more effective, efficient and engaging," explains Kilbane.

And SMART tools in particular, she explains, are great resources.

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"The tools that SMART provides can help a teacher differentiate the content students are learning by providing them access to materials in different formats. The learning process can also be modified with various tools that SMART provides to enable the learning process to be different for individual learners," says Kilbane.

She explains that teachers haven't always had the powerful tools required to design instruction that is both interesting and engaging for their students while also being based on their needs. But with a tool like SMART Notebook collaborative learning software teachers can easily design and then modify materials that will work for their students.

"A tool like Notebook enables a teacher to become a designer and apply what they know about their students to make materials and instructional experiences work for their students. Notebook allows teachers to modify instruction and the materials that facilitate it very simply for learners who might just need different kinds of support," says Kilbane.

For example, Kilbane suggests that a teacher can do many things to tailor instruction even with just one SMART Notebook lesson activity downloaded from the SMART Exchange website. The teacher can use the lesson activity "as is" to support whole class instruction for most students and then add additional pages that offer special scaffolding for students who need it. The SMART Recorder tool could be used to record the teacher delivering the lesson for those who might benefit from seeing it again. Students who need to see the content directly on a screen in front of them could use a SMART Table interactive learning center or the SMART Notebook App for iPad.

Kilbane believes, "Each type of support provided by SMART empowers a competent teacher to design a supportive structure for learners and limit those who might fall through the cracks. And that support ranges from SMART Exchange and Notebook software to the Recorder feature and the Notebook iPad App.

Another key component to differentiated instruction is knowing your students and Kilbane says one of the ways she instructs teachers on how to get to know their students is through pre-assessment using the SMART Response interactive response system. "Using the Response clickers to do pre-assessment helps teachers learn more about their students that they can put into making good instructional decisions as they select materials and as they modify materials that they might get on SMART Exchange or from other sources."

Differentiation continues to grow and develop with some educators moving beyond the basics of differentiation to exciting new developments including using Personal Learning Devices, such as the iPad, to provide students with learning experiences that support their particular learning style.

Among the collection of SMART iPad apps already available, SMART just launched the SMART Notebook App for iPad. The application enables a seamless transition between whole-class, small-group and personalized learning, allowing students and teachers with an iPad to enjoy the engaging lesson materials of SMART Notebook software anywhere and at anytime.

While Kilbane says the use of Personal Learning Devices, such as iPads, to support differentiation is still at the beginning stages in education, schools like **Donnie Bickham Middle School** in Shreveport, Louisiana are ahead of the curve.

The SMART Notebook App for iPad is exciting news to the staff at Donnie Bickham where every single teacher differentiates instruction. This summer the school is adding 120 iPad 3 devices to their already large technology arsenal. Every science teacher will have a classroom set of iPad 3 devices, and as a result, every science student in the building will be exposed to these personal learning devices. The devices will be used for a variety of teaching strategies including differentiation.

"Differentiation is the key. If you had to pick one key to successful education, that would be it," explains school principal Shannon Wall.

"Over the last five years at Donnie Bickham middle school, we've raised our test scores as much or more than any middle school in our parish," says Shannon Wall. "And it's been consistent, it has been in significant increments, and we've been able to maintain the improvement every year. And without a doubt it's been because of the implementation of our SMART products, and our apple products, and just technology in general. But none of this would be possible without SMART.

Additional Resources

- differentiationcentral.com
- caroltomlinson.com