

Teuton Focus

Students use iPad app to reinforce learning, teach peers

How do you use the “break apart” strategy to solve a math problem?

Students in Abby Epp and Cindy DeMoss’ third grade classes can see a video demonstration of the procedure whenever they have any doubt about what to do – written and produced by their classmates.

Third graders are using an iPad application called ShowMe to produce a series of videos demonstrating several math learning strategies. In the past, Mrs. Epp and Mrs. DeMoss would demonstrate the strategies for the students and then make posters about each that were hung up in the classroom. With the availability of the new iPad technology in their classrooms, the teachers decided to try the more interactive method to teach the strategies to their students.

Both teachers believe that one of the most solid ways to learn something is to teach it.

“I often tell my students that teaching is to learn twice,” Mrs. DeMoss said. “I tell them that they can become an expert on a strategy by teaching it to others. They (end up) having lots of ownership with that strategy when they teach it.”

Mrs. Epp and Mrs. DeMoss learned about the ShowMe application for the iPad from fourth-grade teacher Bentley Richert and thought it would have great potential for teaching cursive writing. They could make a video using the application – which captures whatever is written on the iPad screen in a video format – to demonstrate how to form the cursive letters, and then students could review it when needed, rather than the teachers having to demonstrate multiple times. From there, they began to think of other ways the application could enhance learning in the classroom.

“(Using ShowMe to review math strategies) was a by chance thing,” Mrs. DeMoss said. “With the free apps available for the iPads there is always something new we hear about. But, it’s not a frivolous thing that we are just adding in because we can do it. If we’re going to use (an app) it’s going to add to what we’ve already been doing in class.”

Third grade students use nine learning strategies in mastering addition and subtraction. The strategies teach helps such as breaking apart larger numbers into smaller components for easier addition, using a base 10 in subtraction or using a number line to help solve addition and subtraction problems.

Using the ShowMe app was “kind of like magic,” according to Mrs. DeMoss, compared to making a paper poster. The iPad app interactively records what the students say and demonstrate on the device and then uploads and saves it to a website.

To record a learning strategy demonstration, students, working in pairs, wrote out a script that taught the strategy. Then, one

student read the script while the other student illustrated the strategy by drawing on the iPad screen with a stylus. The app records both what the student is drawing and the other student is saying. What they write shows up on the screen as they do it so they have instant feedback. The students practiced several times and then found a quiet spot to record their strategy demonstration. Once the strategy was recorded, it was saved on the ShowMe website and can be accessed by any of the students when they want to review it.

The process has been a learning experience beyond the math emphasis.

“Some third graders have to have a script written out, which they then read. I would write down for them what they said to do,” Mrs. DeMoss said. “Others are more comfortable just explaining it as they go. The readers also had to read at a speed that matched what the student was demonstrating on the screen. They were really excited to do the activities. And, they were often surprised at how they sounded when they played it back.”

Even though the students have recorded videos of the math learning strategies, Mrs. Epp said she still felt it was important to have a visual cue in the classroom (much like the old-style poster method did) to remind the students of the strategies. She is posting each strategy on the wall next to the class math bulletin board to provide that visual cue – but with a twist.

Each strategy has been given a QR code linking it to the website, and the “tag” for that QR code is printed along with the strategy name. These tags are the same type of coded tag found

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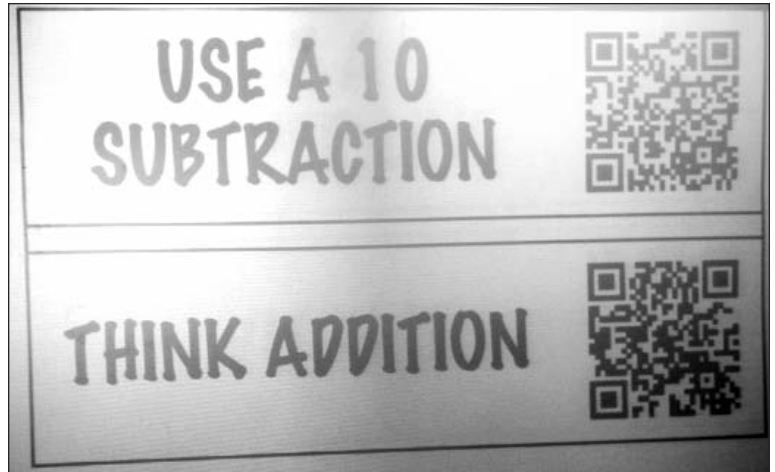
A student uses an iPad to scan a QR code linking a learning strategy to a video demonstrating its use.

in magazines and in stores that can be read by smart phones. Any student wanting to review the strategy can borrow the teacher's iPad, scan in the tag, which connects with the website where they can then view the video on the iPad.

The application to make the QR code, like the ShowMe video app, is free. Mrs. Epp is particularly excited about the possibilities that QR codes can provide in the classroom. Teachers are able to video a lesson, save it to their website and assign a QR code to it. If a student is absent that day, or needs additional review, he or she can scan the tag and have easy access to that lesson either at school or on a home computer.

Mrs. Epp and Mrs. DeMoss said it took about a week to complete the project with the students working on their strategies during math time. Mrs. Epp said that parents will soon have access to a link so they can also view the students' instructional videos.

"(Using ShowMe) is just another method of reinforcing learning. In this case, it allows the students to take ownership of the strategy by putting it in the kids' hands. They can be empowered by teaching the strategy to other students," Mrs. Epp said.



Two math strategies used to help third grade students solve math problems, showing the QR code used to link students to demonstration.