Learning about rates and unit rates might not be every Newark Middle School student’s subject preference first thing in the morning.

But Stacey Quimby’s Advanced 6th grade math class January 16th not only seemed interested at 7:50 a.m. _ 20 minutes after the first period class began _ but engaged with the new lesson and ensuing discussion.

One reason may be that these students simply like math.

Another may be that their teacher made the lesson even more appealing by using technology _ two types of Microsoft instructional software _ OneNote and Forms her students could utilize on their laptop tablets.

As of the end of October, every single one of Newark Central School District’s 2,100 students was assigned a 1:1 computing device allowing offline access to class work, stored files and other educational materials, as well as pre-filtered use of the Internet. They also enable students to digitally communicate with their teachers and vice versa.

Pre-K through second graders at Perkins and Lincoln schools got iPads during the last school year and by the end of October, Kelley School, Newark Middle School and Newark High School students had all received their 2-in-1 laptop tablets complete with fold back screens and stylus pens that allow them to write or draw on them.
As Quimby circled her classroom teaching about rates and units Jan 16th, most of her students took notes with Microsoft inking pens in OneNote, a digital notebook, if you will, that teachers and students share to keep their notes, documents and more in one place.

“OneNote enhances my lessons by allowing students to quickly access all of the documents in use in class in one place,” she explained later. “They don't have to search for individual papers or keep track of all of their work. There are no more ‘lost assignments.’ They are right in the “OneNote” program that functions just like paper and pencil. I also don't need to get extra copies because they can get the work just by copying and pasting the documents into their notebook. Some students prefer paper and pencil, so those kids use their workbooks. I provide multiple ways for all learners to access the information.”

Quimby’s students were also quizzed on previous lesson material Jan. 16th using Forms. The assessment was projected both on a screen in the front of the classroom and on the students’ tablets.

Working in conjunction with OneNote, Quimby said the Forms program grades students’ work, giving them immediate feedback.

“The nice thing about Forms is that all the content and feedback saves right into a page on OneNote so students will always have access to it without having to keep track of all of the work. The program also allows me to get feedback to students in a more timely manner,” she said.

Quimby also frequently uses PearDeck software that works along side PowerPoint to create interactive, real-time lessons.

“Students love seeing their work displayed on the projector when we use PearDeck,” she said. “Kiddos who typically wouldn't participate without the technology, are willing to share their answers. Also, since it is anonymous, students take risks that they wouldn't normally have taken. Students are able to see their work, or anonymously see other students work, to critique or use as an exemplar. I can give immediate feedback during a lesson and have students explain their work without having to take precious minutes of class time charting work on large paper.”
Quimby thinks there are advantages to the greater use of technology in her classes.

“I believe that there is a time and place for technology to be used as long as we don't overuse it,” she said. “Sometimes, I get so excited about something new, I have to remind myself to keep it simple with technology. However, I have seen an improvement with engagement since the students have received their 1-1 devices. Not all kids love the idea of doing all of their work on a computer and would prefer a paper and pencil copy of the work. Technology is just another way I can differentiate and personalize instruction for our students.”

Here’s what a few of her Advanced Math 6 students say:

• Blake Steve _"I like to use my device because I can access different learning sites. I like to use the stylus on OneNote because it helps me write out my thinking."

• Braydan Sherman _"I like using my device for OneNote because it is easier to access than my workbook and I like learning on my laptop for the purpose of using i-Ready."

• Trent Conklin _"I like how everything is so easily accessible. I don't have to keep track of a ton of papers."

• James Berndt _"I like using my device because it is an easy access device and I have access to many different learning programs like Clever, i-Ready, OneNote, and Readworks. It helps my learning because the resources are easily explained and it keeps me engaged in learning rather than having to (just) listen to the teacher talk."