

**EXECUTIVE SUMMARY: DELL** 

## 1-to-1 in K-12

## **Driving Outcomes with One-to-One Initiatives**

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Today's K-12 schools have been charged with a huge task. It is no longer enough for students to master reading, writing and arithmetic. Schools must also foster a rich understanding of science, technology and the global landscape, plus enable students to develop skills in critical thinking, problem solving, collaboration and self-direction, among others.

Achieving these goals is no small feat. It means creating new learning environments that support personalized learning and provide students and teachers with access to high quality materials for learning and instruction.



One-to-one initiatives are vital to the success of these new learning environments. By putting mobile devices into the hands of every student and teacher in their schools, districts open the door for a richer, more individualized educational experience. Learning is no longer confined to a desk and classroom. Teachers, now with a wealth of high quality resources at their fingertips, can design activities that push the boundaries of the traditional classroom, inspiring creativity, exploration and new discoveries.

Clear Creek Independent School District, located in League City, TX, rolled out its one-to-one program fall 2013. Called Latitude to Learn, the program aims to put Dell tablets, running Windows 8, into the hands of all students in grades 4-12. That same year, Northwest Independent School District, in Justin, TX,

launched a similar tablet program in its high schools. Here are some of the outcomes that the districts have seen since implementing their initiatives:

More collaborative, project-based learning activities. Fifth graders took virtual field trips to learn more about the four regions of their home state. Teachers created a map that had QR codes linking to videos about each of the four regions of the state. Students worked in groups, viewing the videos and collecting information on a research document. The research was later compiled on a giant map of the state.

Another project had these students using their tablets to take a formative assessment on poetry. The teacher created QR codes about the poem and placed them around the classroom. The students used their devices to scan and find the questions, then worked with a partner to create a project in Microsoft Word or PowerPoint that illustrated what they'd learned from the poem.

New ways to engage with and demonstrate mastery of lesson content. One high school American Sign Language class features students recording themselves signing vocabulary sentences and questions using the tablets. The teacher observed significantly more participation with this activity than in the past when students practiced sentences only, without the technology.

Art class has changed dramatically, too. Students are using a mix of styluses and their fingers to create original works of art in various new media, like marble sculpting and air brush painting, previously unavailable. The pressure sensitivity of the tablets allow them to draw, blend, and create just as they could do on a real canvas.

**Creative multimedia projects.** In a ninth grade biology class, a student who has a passion for music used her tablet to make a music video detailing the parts of cells and their functions. She used Photo Story and PowerPoint to create the visuals for the video then added original music that she'd created and recorded with Audacity, an audio editor.



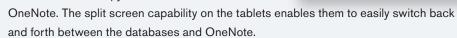
In a high school German class, students are learning vocabulary associated with cities and giving directions. Each student created a map of the city then used the maps on their tablets to learn how to give and ask for directions. Using a split screen and Audacity, they recorded themselves completing speaking assignments. They were able to record and listen to their responses on their devices then upload the recording for their teacher to grade.

**Anytime, anywhere learning.** Elementary school students are using the tablets to learn about poetry. Teachers bring the students outside to take photograph of anything that inspires them, from the playground equipment to the trees and grass where they play. The students then

wrote a series of poems based on those photographs. Each student chose his or her favorite poem from the series, edited it, inserted it on the photograph and published the final product on their Dell tablets.

**Personalized learning.** With the tablets and apps like *Today's Meet*, teachers can change the flow of their lesson plan to suit students' needs. The app allows students to ask questions, discreetly, in real time, during a lesson. This type of instant feedback enables teachers to see where individual learners are struggling or which topics may need additional explanation for the entire class.

Develop digital literacy skills. A high school language arts teacher is using the devices to teach students how to write research papers. Students use the tablets to scour databases for research articles and then copy that information into Microsoft



Other students, in the German class, are using Skype to practice their skills. The class has partnered with a school in Germany and meets on occasion to hold discussions with their international peers.

**Improve student organization.** The tablets are helping students better manage their schoolwork. Before the device rollout, students used traditional notebooks and binders to manage their assignments. If assignments were lost, there was no way to recover them.

With the Dell tablets, students have better way of storing their schoolwork. Each student has a personal storage space on OneDrive (formerly SkyDrive) a file hosting service. This makes it much easier for students and teachers to keep track of assignments.

**Deepen learning by providing access to educational resources.** Before the Dell tablets were implemented, students had limited access to high-quality, up-to-date resources. Most research was done using books during weekly visits to the school library.

Now, however, the doors to the research vaults have been flung open. Students at CCISD are using their tablets regularly to tap into a number of rich educational resources. No more waiting for "Library Day" – research can happen anytime a student needs it.



**Reach students with special needs.** The tablets have enabled students with special needs to better participate in classes alongside their peers. While these students may not be answering questions aloud in class or participating in group projects, teachers do report improved confidence levels among these learners.

One teacher cited the example of a set of twins who are autistic. The siblings would only associate with each other and refused to produce any writing or similar work. Now, using the tablets and an app called *Kids Story Builder*, the twins are taking photos, communicating and writing what they recited. The teacher noted a profound change in their attitudes; they were clearly proud of their work.

One-to-one initiatives are designed to set a new precedent for learning. As detailed in a series of videos available online, the programs at Northwest and Clear Creek provide ways for students to hone their higher-level thinking skills and develop into self-directed learners; they enable students to collaborate with their classmates and make new

connections with their peers in the global community; and they create opportunity for students to become true innovators, exploring and testing new ideas and concepts. One-to-one programs open the doors for learning to happen in a way that prepares today's students to be successful in a 21st century world.



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