

## Smartphones in the Classroom Examples

Mobile learning devices (MLDs), such as smart phones, are powerful enough to be used as computers. Most MLDs have built-in cameras, the ability to access the Internet, and many other features that have educational possibilities.

### Rural Elementary School Example

Students in grades 3–7 at St. Mary’s, a rural elementary school in Ohio, use mobile learning devices in all their academic classes. Over 800 students and 29 staff members participate in the program. Parents and students sign a contract promising to take care of the devices and return them in good condition at the end of the school year.

Kyle Menchhofer, the district technology coordinator, suggests that the devices have improved teaching and learning in several ways:

- Students are more engaged and their academic performance has improved.
- Boys tend to show a greater interest in writing.
- All students are collaborating more, asking each other questions instead of asking the teacher.
- Teachers interact more with students during class time.
- Using GoManage, an online management system, teachers can modify assignments to meet students’ individual needs.

The school district’s technology coordinator points out that the cellular connection gives students access to the Internet at school and at home. He adds that the district has not added any support personnel to maintain the mobile learning devices and has no intention to do so.

### Reference

Menchoffer, K. (2010, June). Mobile learning pioneers: Scaling up. *District Administration*. Retrieved from [www.districtadministration.com/viewarticle.aspx?articleid=2420](http://www.districtadministration.com/viewarticle.aspx?articleid=2420)

## Middle School Example

As part of their everyday classroom learning experiences, fifth-grade students in a Texas middle school used cell phones donated by HTC\*, a cell phone manufacturer; had connectivity donated by Verizon\*; and used mobile software provided free of charge by GoKnow Software\*. Their teacher, Matt Cook, began the pilot program in 2009 and enthusiastically describes how his students have used the phones to enrich their learning experiences. His key observations include:

- Students created images of the solar system on their phones and then animated them to show how objects orbit.
- Students used animation to show how the movement of decimals changes number values, took pictures, and completed collaborative research projects.
- Students created spreadsheets and documents, and shared them with each other.
- Students used their phones to take photos during science labs and sent photos of their work to their teacher.

The program has not been without challenges, however. The phones cannot be used for making phone calls or texting, and if a student is caught using a cell phone inappropriately, the phone is taken away and parents must pay a fine to retrieve it.

The idea for the program began when Cook noticed how many of his students used cell phones and wondered how he might take advantage of their interest and expertise. After attending a conference where he went to “every cell phone related session he could find,” he returned with a plan to find a company that would fund a pilot program. After a great deal of work, he enlisted the help of Verizon, HTC, GoKnow, and Microsoft Mobile\*. Cook then worked to inform parents, providing information about the purpose and proposed outcomes of the program long before students received the phones. The district held workshops to assure parents that the phones would not detract from learning but would rather be used to enhance academic achievement (Bafile, 2009).

## References

- Bafile, C. (2009). *Mobile technology goes to school*. Education World. Retrieved from [www.educationworld.com/a\\_tech/tech/tech248.shtml](http://www.educationworld.com/a_tech/tech/tech248.shtml)
- Schachter, R. (2009, November). Mobile devices in the classroom. *District Administration*. Retrieved from [www.districtadministration.com/viewarticle.aspx?articleid=2198](http://www.districtadministration.com/viewarticle.aspx?articleid=2198)

## High School Example

The School Board in Walsenburg, Colorado, recently enacted a new policy where high school students can use their cell phones in class for educational purposes. The policy is partly in response to a lack of technology in the school. Permitting the use of cell phones as computers can allow teachers to incorporate more technology into instruction, even though school computers are not always available. For example, in a science class, students with video capability on their phones recorded a geology diagram for later reference.

Overall, students have expressed satisfaction that they can access the Internet during class to find examples of a topic or conduct further research. In contrast, some parents have expressed reservations about the new policy, fearing cell phones will have a detrimental effect on learning. The principal, however, believes that students will rise to the occasion, knowing that using their cell phones in class is a privilege that can easily be revoked.

**Note:** Interestingly, the change in cell phone policy has been implemented along with another policy called *No Homework*, which is designed to reduce stress and improve student learning. Teachers are expected to end each class period with an in-class assignment that will allow them to gauge students' understanding of concepts. If students appear to understand, the teacher gives an extension assignment. If students do not understand, the teacher plans to reteach the concept the next day. (Aubry, 2010).

## Reference

Aubry, J. (2010). *Two new school policies: Cell phones, iPods okay in classroom*. Colorado Springs, CO: KKTv. Retrieved from [www.kktv.com/news/headlines/83306172.html](http://www.kktv.com/news/headlines/83306172.html)

## Further Reading: Smart Phone Initiatives

### **Math Goes Mobile**

[www.wirelessweek.com/Articles/2008/03/Math-Goes-Mobile](http://www.wirelessweek.com/Articles/2008/03/Math-Goes-Mobile)

A North Carolina program gives at-risk ninth graders smart phones to help them improve their math skills.

### **Mobile Learning Pioneers: "You Gave Them a What?"**

[www.districtadministration.com/viewarticle.aspx?articleid=2421](http://www.districtadministration.com/viewarticle.aspx?articleid=2421)

A small, rural town in upstate New York gives its fifth and seventh grade students and their teachers mobile learning devices.

### **Mobile Learning Pioneers: Increasing Time on Task**

[www.districtadministration.com/viewarticle.aspx?articleid=2422](http://www.districtadministration.com/viewarticle.aspx?articleid=2422)

Fifth graders in a suburban elementary school use mobile learning devices in science, language arts, social studies, and math.

### **Spa City Fifth-Graders First in Region to Learn on Smart Phones**

[www.saratogian.com/articles/2010/01/08/news/doc4b46b0362c7fb628198254.txt](http://www.saratogian.com/articles/2010/01/08/news/doc4b46b0362c7fb628198254.txt)

Students share their thoughts about using smart phones in the classroom.