

# Learning on the Ride

By Katie Ash — January 16, 2009



A pilot program in rural Arkansas that uses mobile Internet technologies to start the school day from the moment students board the bus has caught the attention of educators and ed-tech enthusiasts around the country.

The Aspirnaut Initiative aims to boost student performance in math and science in rural communities by establishing a community “schoolhouse” where students can get help in those subjects, expanding opportunities for summer school programs and field trips, and equipping buses with wireless technologies so students can use travel time to study math and science and take online classes.

Billy G. Hudson, a professor at Vanderbilt University’s school of medicine, in Nashville, Tenn., conceived the program as a way to pay homage to his rural roots. “Rural kids tend to be underserved and have less opportunities, and this program seeks to give them opportunities to advance in math and science,” says John R. Jones, the program coordinator for the Aspirnaut Initiative.

The initiative defines the word “aspirnaut” as “a student who aspires, seeks, and achieves. Students in the program, which began during the 2007-08 school year in the 4,175-student Sheridan school district in Arkansas and spans all grade levels in the K-12 district, are provided with MacBooks or XO computers, and video iPods to use on their bus rides, which can stretch to more than two hours a day.

Because motivation and interest play such a strong role in whether students successfully complete online courses, students involved in the program are required to go through an application process, says Jones.

“We want kids who absolutely want to learn about math and science,” he says, not just students who’d like to have a laptop for the bus ride. Currently, about 15 students are approved for program participation.

However, program officials are also looking at purchasing drop-down screens for the buses so all students on the bus could be taking advantage of that time, says Jones, and there are plans to expand the program to reach even more students.

## Video iPods and Computer Games

Candace L. Wilson, a 6th grade science teacher at the 880-student Sheridan Middle School and the community classroom teacher for the Aspirnaut Initiative in the district, believes the effort has had a tremendous impact on the students.

“This initiative has put computers in these students’ hands and opened the world to them,” she says. “It broadens their experiences and gives them opportunities that other students don’t have.”

Students in the elementary grades mostly spend their time listening to podcasts on the video iPods and taking part in online educational math and science games, such as BrainPOP, with the XO computers. The middle and high school students usually receive the MacBooks in order to participate in more-formal online courses through Aventa Learning, an Anthem, Ariz.-based company that offers online courses.

Students who successfully complete their assigned online courses using the MacBooks for three consecutive years will be allowed to keep them. So far, the student response to the program has been positive.

“I like being in the Aspirnaut program because it helped me to meet new people, and it helps me learn more about what I know and what I don’t,” says Tristen Davis, a 5th grader in the district.

The program recently expanded to include students from the 500-student Omaha school district in northern Arkansas as well, and representatives from the Aspirnaut Initiative have appealed to the Arkansas legislature to receive funding to start the program in five other districts.

### ‘Real-World Situation’

Rural communities are especially suited to benefit from the Aspirnaut Initiative because school consolidation and other factors have greatly increased the amount of time that students in those places spend on buses, says Jones, the program coordinator.

But some rural education advocates worry that the initiative is simply a small attempt at solving a much bigger problem. “Giving [the students] a computer is not going to solve the overall problem [of long bus rides],” says Marty Strange, the policy director for the Arlington, Va.-based Rural School and Community Trust.

And because of the selectivity of the program, it will likely only affect students who already excel in math and science, rather than those students who are struggling, Strange says.

But some ed-tech experts, such as Donald G. Knezek, the chief executive officer of the Washington-based International Society for Technology in Education, or ISTE, think the program has far-reaching implications that could transform the way students in urban and suburban as well as rural communities use their time.

The initiative provides a working prototype for other schools to follow, says Knezek. And the program could also help students prepare for a 21st-century work environment, suggests Knezek. “We’re all doing mobile computing and mobile work,” he says. “It’s preparing [students] for a real-world situation.”

