

Rural Arkansas school turns school buses into classrooms

A rural Arkansas school district hopes to turn school buses into classrooms

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The Sheridan school district in Arkansas is using technology to add academic value to the three-hour commute endured daily by students from neighboring rural communities. Originally conceived by Vanderbilt University biochemist Bill Hudson, Arkansas's [Aspirnaut Initiative](#) brings laptops, iPods, and wireless Internet to school buses in an effort to promote science education.

Mobile computing technologies are increasingly perceived as an important tool for improving the quality of K-12 education. The Aspirnaut Initiative is the latest evidence of this emerging trend and could provide insight into the viability of mobile computing education programs. For the duration of the program's three-year trial, students aboard Sheridan's Bus 46 will use iPods to listen to educational podcasts, and "high ability" students will use laptop computers to connect to the Internet and interact with web-based learning programs. According to superintendent Scott Spainhour, students could someday receive actual course credits for the time they spend learning on the bus. At the end of the three-year trial, students who complete the program will be permitted to keep their iPods and laptops.

Opposite ends of the e-learning spectrum

A controversial e-learning initiative in Michigan that would have involved providing iPods to every student in the state was recently derailed in the face of widespread public criticism and allegations that the state legislators behind the program received personal incentives from Apple. The Michigan program was widely seen as a waste of state resources and a needless burden on taxpayers. Indeed, education technology programs are often regarded as poorly-planned boondoggles due to frequent mismanagement and high costs. Schools often lack the technical expertise required to make sound purchasing decisions and expensive hardware often goes unused. In many states, basic school needs are ignored in favor of costly technology programs that look good on paper but rarely live up to expectations.

Given all the problems faced by e-learning programs, will the Aspirnaut Initiative be able to succeed? There are some important differences between Aspirnaut and the Michigan program that are worth considering. With proper planning, highly-targeted technology initiatives can be used with success to resolve individual problems, but technology in and of itself isn't a panacea that can magically eliminate the impediments that detract from quality math and science education. Unlike the Michigan proposal, which offered a statewide program without a clearly-defined set of goals, the Aspirnaut program is designed to fulfill a very specific need for a particular audience of students. Aspirnaut's objective is to find a practical way to bring academic value to long bus rides for the benefit of students in rural communities who have limited exposure to technology.

Another advantage of the Aspirnaut program is that it differentiates between students on the basis of ability and provides individualized learning experiences accordingly. Such differentiation is important, because not all students are developmentally ready for advanced math and science curriculum. By providing students with access to technology and material based on their own readiness for it, the program limits the technology's potential to become a distraction rather than a learning aid.

It's also important to note that the Aspirnaut program is a limited three-year trial that focuses on a single bus rather than a statewide program. By performing an extensive trial before broad implementation, the program can easily be adjusted as needed to compensate for issues that emerge as the trial progresses. If a larger program is eventually rolled out, implementors will have the benefit of experience and reliable data to help determine what works and what doesn't. Finally, I think it's worth noting that the Aspirnaut program receives donations from Vanderbilt University and is partially funded by private donations and fund-raising, so the experiment isn't entirely funded by taxpayers.

As technology becomes more important in the classroom, the lessons learned by unique and creative programs like the Aspirnaut Initiative will provide valuable insight to educators. It is imperative for state legislators and school districts to base technology initiatives on the results of practical trials rather than the overinflated rhetoric of vendors and the latest fads. Schools also must consider ongoing maintenance, upgrade, and licensing costs when making critical technology acquisition decisions. Hopefully, insights gained from programs like the Aspirnaut Initiative will help schools make more practical and productive choices when integrating technology in the classroom.

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