The School Bus Transports ... and Teaches

Stephane Babcock | Associate Editor

For about 40 Grapevine, Ark., students, school begins well before the first bell even rings. As part of a new program that was created in conjunction with Vanderbilt University in Nashville, Tenn., students have been given iPods and laptops to watch science-related video clips and visit pre-loaded educational Web sites.

"We started the program based on a rural area of our district where students have an hour and a half bus ride to school," said Scott Spainhour, superintendent of Sheridan School District. "It started through a conversation with myself and some Grapevine residents."

One of those residents, Dr. Billy Hudson, took the initial idea of turning the school bus into a mobile classroom and has created a program that could someday makes it way into school buses across the country. The Aspirnaut Initiative, a term that describes a student who aspires, seeks and achieves, is a three-year pilot program that aims to highlight the idea that school begins on the bus and stresses the need for math and science education.

"We're using science-based podcasts for the students with the iPods that consist of educational video clips, like from the National Geographic Web site. The laptops are loaded with specific Web sites for the students to view," said Spainhour.

The bus, which is known as the "Garden Seed" bus because its route begins and ends on Garden Seed Road, has been wired for high-speed Internet. This newly installed technology allows certain gifted student, the Rigel Aspirnauts (named after the brightest star in the Orion constellation), to communicate with their mentors at Vanderbilt, where Hudson is a biochemist and the director of the Center for Matrix Biology.

"Depending on the success of the program and the ability to find other organizations to help fund it, we'd like to expand it," said Spainhour. At the end of the three-year pilot, the Aspirnaut Initiative could become "a template to elevate the mathematics and science achievement of K-12 students in other rural Arkansas communities and throughout the nation," according to Hudson's initial proposal.

In other parts of the country, other school districts are also strapping wheels to their classrooms, some before the students enter kindergarten. Preschoolers in Wayne County, N.C., who have trouble making it to one of the pre-K programs in the area now board the bus for a series of lessons. Wee Wings — the name was prompted by a partnership with Seymour Air Force Base — offers children a two-hour program that meets twice a week. The teacher and assistant also act as bus drivers, taking the classroom on wheels to three different locations.

"We purchased a used bus and our transportation department made sure it was in working order, gutted the interior, and rebuilt it like a classroom," said Dr. Marlee Ray, director of instructional support services for Wayne County. "They installed built-in tables that drop down, a working toilet and sink, a wet area, a kitchen area, A/C and heat, and a generator. It's just gorgeous. They did an incredible job."

Students begin with group time where they go over basic concepts like the alphabet, time and days of the week, and they sometimes sing songs. Then they perform a physical activity like "Simon Says" or "Follow the Leader." Next, they are brought back together for a transition to the centers.

The bus has a total of eight centers: an art area with playdough and stamps; a play kitchen; a dramatic center with costumes for dress-up; a manipulative center where students learn to recognize colors and play with beads; a writing center where instructors teach them to hold a pencil, scribble and practice the letters of their names; a section for building blocks; a reading loft; and a science center for exploring bugs and playing with dinosaur toys.

"It's going to give some children whose parents can't get them into a preschool program an opportunity to develop social interaction and literacy skills, and understand basic concepts of color, numbers and so on," said Nancy Reyes, Wee Wings' instructor.

"Research clearly states that early intervention is the key to success in school in later years. In the long term, we are impacting student achievement and improvement. The long term impact is significant," added Dr. Ray.

BETSIE, BUST'R and BEE BEE

The idea for Wee Wings came from a program from another local school district. BETSIE, BUST'R and BEE BEE are the names of three school buses that Burke County Public Schools transformed into a preschool experience for three- to five-year-olds in the area.

"We started the program about five years ago and it is funded through North Carolina's Smart Start program," said Else Hitt, BUST'R's teacher. "We have about 250 kids that we see for an hour and 45 minutes at six different locations two times a week each."

Students follow the same preschool curriculum taught in classrooms around the county. The program also tries to make the experience something that the whole family can become involved with. "We have field trips that are family affairs. We also have a family fun day at the end of the year where all the parents and students from all the locations get together to have fun. There is more socializing between parents than in a regular school and we nurture that with different programs," said Hitt.

