

Bus drives N.C. schools to succeed in science

BY LINDA SHEN
STAFF WRITER

North Carolina schools have a date with Destiny.

At 26,000 pounds, 40 feet and costing about \$430,000, the Destiny bus is anything but an ordinary night out on the town.

The bus, a state-of-the-art outfitted BlueBird chassis, lets students do on wheels what most high school science teachers only dream about.

The technology on board includes a gel electrophoresis apparatus that can separate protein, thermocyclers and spectrophotometers for high-tech biomolecular lab experiments, not to mention bidirectional satellite Internet and IBM ThinkPads.

Masterminding the bus and its vision is Walter "Skip" Bollenbacher, a UNC professor of biology. Inspired but unsatisfied by Boston's CityLab program, which also uses a bus for science education, he brooded over a poster of an enormous bus for more than a year before the answer came to him.

In April 2000, built on a five-year, \$1.6 million grant from Glaxo Wellcome, the Destiny was launched. "The Best Thing in Science Education to Hit the Road" was emblazoned on the side, and Bollenbacher still plans for it

to live up to its initial promise.

Beyond providing a wet lab for under-served schools, Destiny seeks to give teachers resources tailored to their students and classrooms.

Bollenbacher said programs taking teachers out of the equation were not the answer, nor were summer workshops in which teachers were instructed on experiments and science they lacked resources to teach.

"We talk about this science education crisis, and everyone tries to legislate it. That's not looking at the problem at all," Bollenbacher said.

To that end, teachers in the Destiny program have been given variable grants for equipment, and some receive a kit for dry labs in their own classrooms. "Success comes from building sustained relationships," Bollenbacher said.

He said the program isn't meant to patch a struggling science curriculum but acts as a catalyst to introduce new science education technology. Destiny seeks to make each school self-sufficient and works aggressively to bring advanced capabilities into classrooms. "The goal is to make myself superfluous," Bollenbacher said.

Three years later, the reviews are positive and the outlook is good.

At West Bladen High School in Bladenboro, Pam Roberts has integrated the Destiny curriculum into her classroom. "Each and every one of (my students) comes off (the bus) wanting to be a forensic scientist," she said with a laugh.

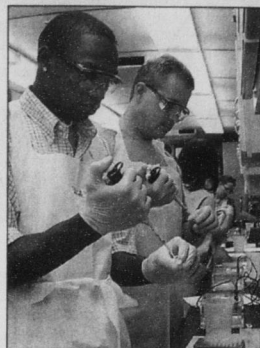
Before the Destiny program, Roberts' students were being bussed to UNC-Pembroke for labs. Students missed a day of class and up to three subjects, including material on end-of-course examinations.

The Destiny bus has helped to maintain the level of excitement about science with two visits each semester to schools in the program. Roberts said the bus serves about 400 of her students. "The bus has become a powerful visual metaphor for what science education should be," Bollenbacher said.

But the road to success wasn't entirely smooth. At first, the Destiny program was met with apprehension from public schools. Grants to teachers were restricted severely, and the bus was viewed as disruptive to curriculum goals.

The tides have turned. Booked as far as two years in advance, the Destiny bus has become a popular commodity in science education.

The Destiny program seeks to address science literacy and reverse



COURTESY OF BETTY BROWN

Students work in the wet lab facilities provided by the Walter Bollenbacher's Destiny bus, a project by the UNC professor.

the national decline in students' pursuing careers and educations in science. Its ultimate goal is to increase awareness of the role of science in future economic prosperity and quality of life.

Between pioneering a new ecosystem model of learning and promoting the "ecotransformation" of learning environments, Bollenbacher has big plans.

"I want a fleet of buses," he said, grinning. "I want a language bus."

Though he is optimistic, Bollenbacher and his vision still face problems.

Lack of recognition of the extent of the science education crisis and the difficulty in changing the way people view education still loom.

Yet Bollenbacher was gleeful as he declared, "Destiny is with child."

With funding from NASA, another science bus, Discovery, is due next May.

Contact the Features Editor at features@unc.edu.

Forum discusses future of duplexes

BY NICK EBERLEIN
ASSISTANT CITY EDITOR

With a one-year-old ban on duplexes set to expire in February, local officials, developers, residents and students have been called upon to help determine the future of the divisive structures.

The Chapel Hill-Carrboro Chamber of Commerce sponsored a discussion forum Thursday to allow groups to weigh in on what purpose the buildings might serve in the town next year.

The moratorium was enacted in response to concerns of residents near campus who said the proliferation of homes built for a student market eroded neighborhood character and prevented families from settling into the area.

"Economics are driving the construction of a different kind of duplex than we've seen in Chapel Hill," said Roger Waldon, the town's planning director. "It will damage the common fabric if the trend continues unabated."

Some developers' practice of fitting as many students into a duplex as possible, Waldon said, has led to a glut of curbside parking, increased noise and neighborhood deterioration, among other things.

Northside neighborhood residents have opposed staunchly duplex construction and are lobbying for the area to become the town's first conservation district. Conservation status would enable the residents to place restrictive covenants on the size and scope of developments in their area.

"Responsibility lies on the developers to care about where people are moving and what happens to the communities," said Delores Bailey, chairwoman of Northside's

conservation committee.

But developers argue that the restrictions unduly limit the availability of housing to nontransient portions of the local population. Scott Kovens, president of Capkov Ventures, said the restrictions have inhibited the full construction of his Franklin Grove development.

Franklin Grove, located next to the intersection of Elliot Road and East Franklin Street, is an upscale development of family townhomes.

"We could have put all 48 of our units into five buildings," Kovens said. "But we decided it was best to break it up some more. These buildings are not what people mean when they say duplex."

The town defines duplexes as two dwelling units on one lot that are joined by a common wall, regardless of size, appearance or use.

Linda Convisor, University coordinator of local relations, acknowledged that some duplexes serve a slanted purpose but said other regulations could ensure the student market doesn't compromise neighborhood integrity. "It's bizarre to say they're not good innately ... it's the management of them."

Virginia Knapp, director of external affairs at the chamber, said she understands residents' concerns but thinks that the restrictions actually undermine the availability of affordable housing that duplex opponents seek to protect.

"People want to move here for the (public) schools but feel that houses are too expensive. Duplexes are a way to go from apartment living to eventual home ownership one day."

Contact the City Editor at citydesk@unc.edu.

THE Daily Crossword

By Stanley B. Whitten

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ACROSS

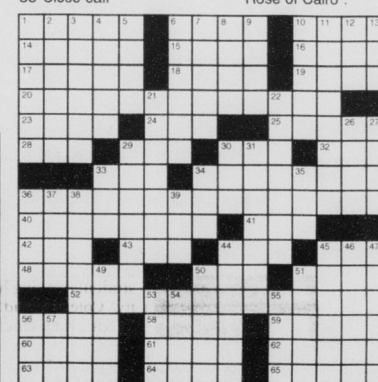
- 1 Tarries
- 6 Beatty film
- 10 Discomfort
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- 15 Verve
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- 17 Loose rock debris
- 18 Supernatural power
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- 9 Catch
- 10 Texas shrine
- 11 Showy roselike flower
- 12 Buzz

- 13 Old name for Tokyo
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- 22 Worshippers
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- 27 Funny Foxx
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- 30 ER neighbor
- 31 City SW of Roanoke
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- 37 Sky bear
- 38 Close call

- 39 Baden-Powell's org.
- 44 Ore products
- 45 Boundaries
- 46 Narrow ridges
- 47 "Raging Bull" Oscar winner
- 49 Gold measure
- 50 Lamb paper
- 51 Ray
- 53 Fiddler or hermit
- 54 Israeli dance
- 55 Drink in one gulp
- 56 Sprite
- 57 Farrow of "The Purple Rose of Cairo"



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For the week of Oct. 13-Oct. 20

219 Hanes Hall
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WORKSHOPS

HOW TO FIND AN INTERNSHIP: Learn how to find internships and how to decide which one is best for you in this interactive session. Please bring your laptop!
Wed. Oct. 15 6:00p 239B Hanes

Sports-Related Networking Night: An opportunity to meet with local working professionals in an informal environment. All professionals will introduce themselves and mingling will follow. Please be on time so you do not miss the introductions! If interested, RSVP to ucs@unc.edu, indicating the program you wish to attend. **Thu. Oct. 16 5:30p 239B Hanes**

HOW TO FIND A JOB/INTERNSHIP IN THE NON-PROFIT SECTOR A program designed to teach you how to put your beliefs to work in a non-profit sector job or internship. **Mon. Oct. 20 4:00p 239B Hanes**

MARK YOUR CALENDAR FOR LAW DAY! Over 75 Law Schools are coming to the Hill Alumni Center. **Tues. Nov. 4 12-3:30p**

PHARMACEUTICAL SALES PANEL: Come listen to professionals in the pharmaceutical sales industry talk about their jobs and the industry as a whole. Business casual attire recommended. **Tues. Oct. 14 4:00p 239B Hanes**

SOFTWARE/IT/MATH PANEL: Come listen to professionals in the Software, IT, and Math industry talk about their jobs and the industry as a whole. Business casual attire recommended. Business casual attire recommended. **Wed. Oct. 15 4:00p 239B Hanes**

ARTS NETWORKING NIGHT: Take advantage of an opportunity to meet local art professionals. If interested, RSVP to ucs@unc.edu, indicating the program you wish to attend. **Thurs. Oct. 30 5:30p 239B Hanes**

EMPLOYER PRESENTATIONS

| | |
|--|--------------------------------------|
| Accenture (10/13) 7-9p 239 | Microsoft Corp. (10/13) 6-7p 307 |
| The Vanguard Group (10/14) 6-7p 307 | E&J Gallo Winery (10/14) 6-7p 239 |
| Jefferson Pilot Financial (10/14) 6:30-7:30p 308 | Hewitt Ass. (10/20) 6-7p 307 |
| The Fund for Public Interest Research (10/14) 6-7p 08 Gardner Hall | |
| Wachovia (10/16) 6-7:30 Carolina Inn | Standard and Poor's (10/16) 5-6p 307 |
| Black and Decker (10/20) 6-7p 239B (All meetings are in Hanes unless stated otherwise) | |

RESUME SUBMISSIONS FOR INTERVIEWS FOR NOVEMBER 3-7

| | |
|---|---|
| MarketBridge (TBA) | CIGNA Actuarial Analyst (10/19) |
| Accredited Home Lenders (TBA) | Geico Direct, Actuarial Assistant (10/19) |
| SPX Corporation (TBA) | Deloitte Consulting, Systems Analyst (10/19) |
| US Airways, Analyst (10/19) | MIT Lincoln Laboratory, Various Tech. Positions (10/19) |
| Jefferson Pilot Financial, Services Professional (11/11) | |
| Moore Wallace, (Southeast Sales), Sales Representative (11/4) | |

3 Clicks to Register → → → 1: <http://careers.unc.edu> 2: "Register with UCS" 3: Enter PID# and complete profile

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Join Microsoft for a Presentation on Monday, October 13th in 307 Hanes Hall at 6pm. Come hear about our 4 Core Technical Positions and our Marketing Leadership Recruit Program.

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