



PHOTO COURTESY OF NORTHRUP GRUMMAN

Chadwick Bacon '07, left front, experiences weightless flight aboard a Northrup Grumman aircraft.

Sky's the Limit

Florida Teacher Loses 'Gs,' Gets 'Gees!'

By Michele Reed

Some teachers will do anything to inspire their students. For **Chadwick Bacon '07**, the sky's the limit — literally.

When his technology students at the Samuel Gaines Academy in Fort Pierce, Fla., were getting ready to build and launch rockets as part of a class module, Bacon's own experience became a living example.

In October, Bacon took part in a zero gravity program for teachers, sponsored by Northrup Grumman. It was an extremely competitive application grant process, and the odds were stacked against him, since the program was designed for science and math teachers, not technology teachers.

Out of 900 teachers who apply, only 50 are chosen.

But Bacon wanted to show his students — many of them from inner city homes and struggling with behavioral or learning problems — that with confidence and persistence, they could do anything. So he persisted in applying and was chosen. He would go into zero gravity Oct. 1. The day after the flight, he showed his students a video of their teacher floating weightless.

"The looks on their faces were amazing. Their jaws dropped down to the floor and their eyes were all big," he remembers. "It was probably the only time I've heard my class silent watching a video.

"It was very exciting for them to see

that. It felt kind of good on my part, too."

"To know that Mr. Bacon had been able to experience the flight was amazing. He encourages us to set our sights high and that good things will happen," says Jazmine Flores, an eighth-grade student. "He is a teacher who inspires all of his students on a daily basis to challenge themselves and to never settle. His accomplishment is a great example of what can happen if you just try."

Putting the 'G' in goal

The students got to see Bacon in a specially retrofitted 727, which performs parabolic maneuvers up and down, sweeping like a signal on an oscilloscope.

When the plane was going up, the teachers experienced 2 Gs — double the gravity of earth.

During various maneuvers the teachers could feel lunar gravity, Mars gravity and zero gravity.

“You feel like you’re in a snow globe all shaken up, with no idea what’s going on,” Bacon describes the zero gravity experience.

In weightlessness, “it’s pressureless, no more pressure on your chest. Your lungs feel light and your whole body gets very tingly,” he says. “You lift up off the ground; couldn’t even stay on the ground if you wanted to. You start levitating in the air. I’d do it again in a heart beat; it’s an adrenaline rush.”

But the flight proved to be more than just a cool experience. It was directly related to one of the modules his students would be studying: rocketry.

“[The weightless flight] enabled me to bring in Newton’s laws and relate it to something I experienced,” he says.

“It also helped me to get the kids excited about setting goals, to know what you want to do in life and then achieve it.”

Choosing goals and achieving them is something this young teacher is familiar with. He wanted to take on the challenge of teaching inner city youth, and wanted a job where he could really make a difference in the lives of young people. He got all that and more in his very first position.

Starting from scratch

He’d landed the job at Samuel Gaines before the school was even built, at the Central New York Teacher Recruitment Days. After working a construction job to make the money to move, he packed up his entire life in a U-haul and hit the road for Florida.

Even an Oswego education couldn’t prepare him for the surprises he was to encounter. Although Bacon had been hired to teach grades 6 to 8, the school had not been able to hire a K-5 teacher, and he ended up building a technology education program for the entire K-8 school, and teaching nine different grade levels in two buildings.

“It was like the proving ground for me, whether I was going to make it as a teacher,” Bacon says.

When Bacon arrived at his new school, everything for both the science and technology classrooms was in boxes.

He walked into a 40-by-40 foot classroom, stacked floor to ceiling with half a million dollars of equipment.

Bacon tore the boxes open, inventoried the contents and put together the classrooms every evening during the first two

weeks of school, after classes were over.

“All the computers were still in their original boxes: 16 computers, 16 monitors, 16 keyboards,” he remembers.

He took them out and programmed them, networked them and installed software.

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MITCH KOOPFAIN, COURTESY OF HOMETOWN NEWS

Bacon prepares a rocket to launch in a classroom experiment.



MITCH KLOOR/RAIN, COURTESY OF HOMETOWN NEWS

Chadwick Bacon '07 works with seventh-grade student Jonathon Peavy, cutting balsa wood to make a CO₂-powered dragster.

The classroom is set up in a modular system, with 16 separate workstations, each devoted to a different topic with 16 different things going on in the classroom at any given time.

At one station, the kids could be working on electricity and ask Bacon about Ohm's law, while at another, they're working on robotics, with an entirely different set of questions.

"It's challenging for me and just as challenging for them, too," Bacon says.

But he feels it's one more way for him to grow as a teacher — and his students to grow as people. "They come into the

classroom as students and leave as young adults who are self-sufficient, productive and solve problems on their own."

Helping these students — many of whom qualify for reduced lunches and are on Independent Educational Programs for behavioral or learning problems — is challenging but rewarding for Bacon.

"They've lived the life of a 30- to 40-year-old and seen things that no child should see," he says.

"But they're very deserving and very grateful for what you do for them."

The kids inspire Bacon to extra effort. "Every day you have to come in and do 150

percent. The kids see what you're putting in," he says.

"When I went into the teaching program, I wanted to make the most impact that I could in teaching. These kids, of any kids, needed it the most."

He observes that kids are raised by the media and have as their goals to be famous sports or music stars.

"I was the same way — I wanted to be a professional football player," he recalls. "I've seen teachers squash those dreams, but I say, 'That's great — you have to pursue that 110 percent,' but then I try to give them as much exposure in my classroom to light that spark [of learning]."

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— Chadwick Bacon '07

Bacon exposes the children to fields like electricity, flight technology and oceanography in the hopes that they can envision a career in science or technology.

It will all be worth it, he says, "if it lights a spark that guides them down a path to a career they are passionate about."

For Bacon that spark was lit at Oswego and by the technology education professors who inspired him, including design teacher John Belt. The entire program impressed and influenced him, from manufacturing class with **Dan Tryon '89** to methods class with Mark Springston. "All the technology teachers at Oswego State collectively, I saw them as one big puzzle: All their pieces fit together perfectly to make the big picture possible," he says.

With lofty goals, but a down-to-earth work ethic, whether he's experiencing space or unpacking computers, Bacon is willing to do whatever it takes to make a direct connection with his students. ●