

### Shopping

For Jackson Metro  
and State News  
visit [clarionledger.com](http://clarionledger.com)

For Clinton News  
visit [clintonnews.com](http://clintonnews.com)

For Rankin News  
visit [rankinledger.com](http://rankinledger.com)

### Archive section

[December 24, 2005](#)  
[December 22, 2005](#)  
[December 20, 2005](#)  
[December 17, 2005](#)  
[December 15, 2005](#)  
[December 13, 2005](#)

December 27, 2005

## Robotics simplified

By **Raymond Reeves**

[rareeves@jackson.gannett.com](mailto:rareeves@jackson.gannett.com)

Physics is more than rote memorization of information. According to Asif Khandker, an associate professor of physics at Millsaps College in Jackson, it is a way of looking at the world.

For Chris Odom, a graduate of St. Andrew's Episcopal School and a former student of Khandker's at Millsaps, a scientific and technological world view can be summed up in one sentence: "Wouldn't it be cool if ...?"

Odom, now a teacher himself, has taken that question and put it into a textbook that combines his teaching areas of physics, robotics and computer programming. That book, *BasicX and Robotics: The Art of Making Machines Think*, is now available through Robodysey Systems.

"I think this ties back into his desire to learn. It just makes sense," Khandker said of Odom. "He wants to explore new areas. He wants to apply what he has learned. Many teachers, while they might have known the subject themselves, never really took the time — or maybe knew how — to really explain and motivate. ... Chris stands out, simply because he was so motivated."

That attitude showed even before Odom reached Millsaps.

"Chris is an extraordinarily fine young man," said Mimi Bradley, a college counselor who worked with Odom when he was a



Photos by Will Smith/The Herald

**At the Madison Library on Wednesday, Chris Odom shows how the BX-24 microcontroller chip makes robots "think." Odom has written a textbook to teach students the basics of the chip.**

student at St. Andrew's. "He loved to learn, and he loved to excel. Even in high school, his love for and ability in the sciences was evident."

Khandker said Odom had "an enormous capacity for asking questions" back then, and that same quality is what Odom said he likes about teaching. After graduating from Millsaps and receiving his master's from Clemson University, he taught at St. Joseph Catholic School before returning to Clemson as a professor.



**Children react to the robot, programmed by Odom, a St. Andrew's graduate.**

Odom is now back at the high school level, teaching at the George School in Pennsylvania, a college preparatory boarding and day school. He has tied one of his passions, robotics, into his science and computer programming lessons, giving a practical side to the teachings.

"With robotics, things have come full circle," Odom said. "Used to, you couldn't do anything with robots unless you had tens of thousands of dollars, a research grant and worked at a research institution. Now, it becomes very relevant to people at home; junior high school kids can build robots that literally have the same basic capability as the ones roaming around Mars right now."

Odom's interest in robotics goes back many years, but he did not have the money and backing to do much with his interests. While teaching at Clemson, he was working on a rocket campaign for undergraduates, and some students in the electrical engineering department had been working to program a microcontroller computer chip. A student of Odom's, who now works at NASA, brought this chip into the rocket discussions and things literally took off.

Odom took that open-minded approach with him to the George School, where he helps students turn those "Wouldn't it be cool if ..." thoughts into reality.

"Because he has experience teaching, he knows what is required for (International Baccalaureate) and other standardized tests. He somehow managed to wrap up so many different disciplines into it. Kids are working on a variety of different things in a variety of different subjects," said Brian Patton, vice president of Robodyssey Systems.

Patton said that, even though Odom's textbook has only been available for about seven weeks, he's already received some orders for it.

"Robodyssey was certainly interested in a curriculum that they could take to classrooms. There's not one out there; this is the first one I've seen. And it's not just robotics, it's science and math," Odom said.

"Also, my computer science classes are very diverse. I have some students in calculus and some in algebra all in the same room," he said. "This way I can give them a book and they can go at their own speed."

[Back to top of page](#)

Copyright © 2005 The Madison County Herald. All Rights Reserved.