

# The Herald

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## Playing with Ideas



Michael Gramelspacher of Greenfield, Ill., put together a prototype of Air Pick on Jan. 24. He co-invented the toy with his business partner, Rory Sledge of O'Fallon, Ill. The electronic toy is shaped like a guitar pick and, when flicked as if playing a guitar, it plays the notes to a song. Michael, a 1997 graduate of Jasper High School, was working to put together the prototype of the already licensed product that will travel with him and Rory to the New York Toy Fair later this month to be displayed for distributors to see.

Story by Candy Neal

Photos by Dave Weatherwax

Tiny puffs of smoke occasionally float from the tiny circuit board that toy inventor Michael Gramelspacher is bonding micro wires to using a hot soldering tool.

The Jasper native leans in close to make sure the wires have adhered and the board's other chips are in place. His business partner, Rory Sledge, is downstairs in Michael's Illinois home, painting the casing in which the board will be placed later.

The completed product will be music to players' ears, once the toy hits the market. Michael and Rory will help toy company Ohio Art promote the Air Pick, a toy that plays guitar riffs, at the New York Toy Fair this month.

"Most of our toys have an electrical component. We wouldn't just make a truck," Michael, 32, says on a Monday in late January, holding up one of the trucks belonging to his 18-month-old son, Henry. "We'd make a truck that moves or makes sounds."

The two men, through their company SG Labs, are always creating toys and toy prototypes.



With the use of computer-aided design software on his computer, Michael is able to build prototypes for his inventions in his home office. Displayed on the screen are drawings for the Air Pick.

One of their crowning glories is the Rubik's Slide.

The Slide, a one-sided electronic version of the Rubik's Cube with 10,000 puzzles to solve, was approved by Seven Towns, the company charged with approving any takeoffs of the Rubik design. The company reviews more than 300 ideas each year.

Not only did Seven Towns like the Slide, Rubik's Cube creator Erno Rubik personally tweaked the look of the Slide before it went on the market.

When the Rubik's Slide debuted on the QVC cable channel last summer, it sold out — all 27,000 units — within 30 minutes. It has won Creative Child Magazine's Game of the Year Award, e Magazine's All Star Award and The National Parenting Center's Seal of Approval. Toy expert Stevanne Auerbach, also known as Dr. Toy, selected the Slide as one of the best children's products for 2010. The electronic toy also has been featured on "The Today Show," "Fox Business News" and "Good Morning America."

"We are different from a lot of toy inventors out there," Michael says. "Most inventors are artistic. There aren't a lot of technology inventors with our type of background in the industry."

Michael, the son of Jerry and Gail Gramelspacher of Jasper, graduated from Jasper High School in 1997.

"Dad taught me a lot about electronics when I was young," he says of his father, who owns a remodeling company. "After that, I knew I wanted to be an engineer. But I thought I wanted to make robots."



Rory worked by flashlight to apply a coat of paint to the Air Pick prototype Jan. 24 in the basement of Michael's home. The two are converting the section of Michael's basement into a work area.

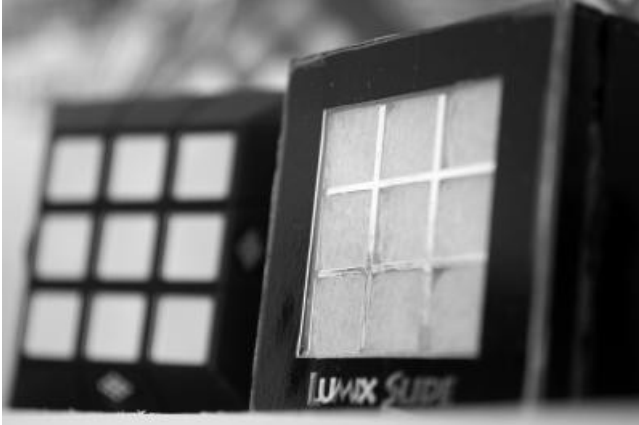
He met Rory when they were freshmen at Rose-Hulman Institute of Technology. They worked together as partners on products for their classes at the time.

“We created a way to send audio from a device to home speakers, before Bluetooth technology,” Rory says.

They both graduated from Rose-Hulman in 2001, Michael with an electrical engineering degree and Rory with a computer engineering degree. Michael worked in Louisville for two years and St. Louis for five years before settling in Greenfield, Ill., with his wife, Addie. They consider it the halfway point between St. Louis, where Gramelspacher used to work for Veil Interactive Technology, and Illinois College, where Addie teaches and gives private voice lessons. They met as college students and got married in 2004.

After school, Michael worked for a company in Louisville and convinced Rory to do the same.

While working in Louisville, they created a strain of Christmas lights on which each bulb would change colors individually. “It was neat to see,” Michael says. “But at the time, they were too expensive to (mass) produce.”



A prototype of the Rubik's Slide sits next to the finished product on a shelf in Michael's home office. Michael and Rory co-invented the toy that is an electronic version of the classic Rubik's Cube toy. When the Rubik's Slide debuted in July on the QVC television station, 27,000 units were sold within 30 minutes.

As they developed technologies for their employers, Michael and Rory came upon a revelation: “If we can develop these for other companies, we can develop them for our own company,” Michael says.

They created Straylight Innovations in 2003. The company's focus was developing embedded systems for portable electronics. By then Michael lived in St. Louis and Rory lived in O'Fallon, Ill.

Through their business interactions, Michael and Rory met other toy inventors. “We learned that most big companies' toy creations come from inventors,” Michael says. “The core ideas don't come from the companies.”

In 2007, they renamed the company SG Labs and changed its focus to creating electronic toys.

“They have very different personalities,” Addie says of the two men, “but they complement each other.”

Michael agrees. “Rory is a finisher,” he says. “I like to start lots of things and get 80 percent of it done before I start to lose interest.”

They both like playing video games and did that a lot before they had children. “Sometime we'd take a break for an afternoon and play 'Starcraft 2,’” Rory says. “Now, we don't have time for that. We have too much work to do and more people depending on us to get products into production.”



Michael and Rory both take their personal notebooks with them to their regular lunch spot at 3rd Base Bar & Grill in Greenfield. "Lunch is where we come up with a lot of our ideas," Michael said. In the notebooks they keep a running list of ideas for possible inventions as well as sketches for prototypes.

Their ideas for toys surface in all kinds of ways. They look at current technologies and wonder how that technology could be used in a toy. They brainstorm together and individually. Each carries a notebook that contains a slate of ideas, drawings and "to-do" lists.

The idea for the Slide emerged from a list of ideas to update the Rubik's Cube, something they were interested in doing.

Many times, ideas just pop into their heads. That's how the Air Pick was born.

Rory wanted to create some kind of toy that played guitar riffs and thought about making a button guitar, but he knew that would cost too much. "I got the idea while I was out walking my dog, with a bag of poop in my hand," Rory recalls. "It just came to me."

He told the idea to Michael, who liked it, and they got busy producing a prototype.

They work out of their homes, which helps the family dynamic. Henry typically stays home with Michael while Addie is at work. "I'm inspired by him," Michael says. "Through playing with him, I come up with ideas."

Michael goes to Rory's house to work about once a week, and Rory also goes to Michael's house to work in his home office. Michael's dad is in the process of finishing out office space in the basement.

"We keep everything in crates, since we go back and forth so much," Rory says.

The duo goes to toy fairs each year in February and October. They take their new ideas with them to make pitches to companies.



It took more than two years for Michael and Rory to get their Electra Doodle Creative Light System from an idea on paper to a finished product sold in stores and online. The device uses software that allows the user to create with light different designs and drawings. Addie Gramelspacher helped Henry play with the toy the morning of Jan. 24.

"We take everything we need in our rolling crate, which also serves as a seat for one of us," Rory says. "You're making pitches to companies and usually there's only one seat. You're in this small room and you have a short amount of time to make a pitch."

“They’ll say no quickly,” Michael notes. “But sometimes they’ll say that they’ll think about it.”

Typically, it takes almost a year for an invention to go from concept to toy. The Electra Doodle Creative Light System, an electronic contemporary of the Etch-A-Sketch, took that long to get on the shelves of toy stores. “It went through six different designs,” Rory says.

The Air Pick was an exception. “We built our prototype in September, showed it in October and had a buyer immediately,” Michael says. Because Ohio Arts wants to show the toy to distributors at the New York Toy Fair, the company hired Michael and Rory to make 25 picks by hand.

“Michael and Rory are some of (the) best at identifying the latest technologies and creatively turning them into cool toys with a lot of play value,” says Martin Killgallon, senior vice president of marketing and product development for Ohio Art, the company that bought the Air Pick. Like Seven Towns, Ohio Art reviews hundreds of toy ideas each year.

“Not only are they innovative, but they are great people who are a pleasure to work with,” Killgallon says. “They are always willing to partner with us in any manner to ensure we are bringing the best possible product to market.”



Addie and Michael spent time together with their son, Henry, the morning of Jan. 24 in their home. Working primarily out of his home has allowed Michael to spend more time with his family. Ideas for new inventions can come to mind at any time, Michael said, and included an idea that came to him the evening before while he was playing with his son.

By the afternoon of that day in late January, the duo finishes one of the five Air Pick toys they have left to make by hand; they finished 20 earlier in the month. Michael grasps the small contraption, which looks like a thick guitar pick, and quickly flicks his wrist. The motion causes a guitar note to come from the pick’s tiny speaker. With a few more timely flicks, the pick plays the riff to Deep Purple’s “Smoke on the Water.” Each pick will play the riffs to three well-known rock songs.

Since Michael and Rory have built up their reputation in the toy industry, they have some job security.

“For kids, play is their work. So parents think that it’s important to have toys,” Michael says.

“They will always scrape money together to buy toys.”

Michael sees SG Labs continuing to grow. “We could build up our studio or launch our own items,” he says. “We want to keep designing. It’s fun. But it’s a job.”

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