

Special design allowed boy to play all the notes

Ex-NASA engineer designs special recorder, wins Tetra's Gizmo Award

BY WANDA CHOW
NewsLeader

Burnaby music teacher Andrea Griffin was at a loss. She had just learned that one of her Grade 4 students, who is physically challenged, would be unable to progress to the next level in playing the recorder.

Griffin, who teaches at Nelson elementary, didn't know what to do. In Grade 4, kids start off by learning to play the top three notes on the instrument. "This boy, he was an A student in music and played the recorder beautifully."

When told that the next year they'd learn to play the rest of the notes, which are more spread out, the boy said, "What do you do if you can't reach the other notes?"

The challenge is that the boy, who Griffin asked not to be identified, suffers from a disease that has left him with very small hands.

"I didn't want to put him on another instrument, he was completely integrated in our school," Griffin said. "We are in Burnaby. We don't leave kids out."

Griffin heard about the Tetra Society of North America, founded by Vancouver Mayor Sam Sullivan 19 years ago, which provides customized devices to assist people with disabilities. She filled out an application. "I didn't expect much."

The next day, she got a call from South Burnaby resident and Tetra volunteer Gregg Harris asking to meet with Griffin.

"When I came in, I didn't even know what a recorder was," Harris said. "I knew very little about musical instruments."

Despite that, Harris understood the problem immediately and set about solving it.

Griffin was confident he would succeed and even before seeing the final product was already impressed at what Tetra does. She was truly amazed "that a NASA engineer, who worked on Apollo, would come down to your elementary school for nothing, for no money and would help someone who needs help."

Indeed, Harris, 73, is a retired mechanical engineer who worked on the groundbreaking Canadian-made fighter of the Avro Arrow until the John Diefenbaker

government scrapped the project. He then moved to the U.S. to work at NASA and its Apollo project for five years, including two-and-a-half at its manned spacecraft centre. He left to travel the world with his wife Barb just a year before the moon landing.

When they returned to Canada, Harris couldn't find engineering work that interested him - "I guess I was spoiled" - and turned to teaching, spending the last 20 years of his working life teaching math and electronics in Delta.

With that background, it's perhaps no surprise it only took him a few days to come up with a solution. Using copper wire, plastic drinking straws and foam, he modified the recorder's lower keys so they could be played with hands placed further up the instrument, similar to the finger extensions found on a clarinet or saxophone.

Using a wire coat hanger, he also fashioned a neck support to help the boy hold the recorder. As with all Tetra projects, he produced a report and blueprint so "if someone else wants to do it they don't have to reinvent the wheel," he said.

The modifications worked wonderfully and allowed the boy to continue being fully-integrated with his classmates. The boy was "thrilled, his family was thrilled," Griffin said.

The boy is now in high school and doing well. Harris was recognized for his efforts recently with Tetra's Gizmo Award for best children's project. The award is given to the project "that best exemplifies a combination of life improvement, creativity and broadest applicability."

Griffin was only too happy to speak at the awards ceremony. "Gregg gave me a chance to be a part in making a real difference in a child's life, which is what every teacher wants," she said.

Harris was able to eventually meet the student he assisted. "It was a great reward for me, that was far better than any award I could have won."

"That's what Tetra's all about. If I can make somebody's life better, even for a short time, it's very worthwhile and really rewarding."

As for his efforts, he said, "It wasn't a big deal as far as I was concerned."

Griffin replied, "It was a big deal to us."

Tetra has 37 Canadian chapters and two in the U.S. For more information, visit www.tetrasociety.org.

Gizmo winners

Other winners of Tetra's 2006 Gizmo Awards for Lower Mainland volunteers, chosen from more than 300 projects completed since the last awards in April 2003, include:

- Harry Hardy of Burnaby, who created a dressing device
- Volunteer David Graham of Burnaby, who developed equipment that allows a ventilator-dependent quadriplegic to sail
- David Doman of Surrey who developed a device that allows hospital patients to place varying and measured amounts of pressure on their injured or post-operative leg
- Vancouver's Roy Hamaguchi, who created climbing harnesses to allow a quadriplegic hiker to tackle the West Coast Trail.



MARIO BARTEL/NEWSLEADER

Andrea Griffin, a music teacher at Nelson Elementary School in Burnaby, shows off the special recorder modified for one of her students who couldn't play a standard instrument by Gregg Harris, a former NASA engineer who now volunteers for Tetra.