



GROWING STEMS

CURIOSITY AND PLAY PLANT SEEDS OF DISCOVERY FOR SCIENCE/TECHNOLOGY/ENGINEERING/MATH CURRICULA IN NIAGARA CHILD CARE CENTERS.

STORY BY KIMIKO MARTINEZ

When Kiwanians in the Niagara, Ontario, region set out to help preschoolers, they looked for tools and resources that form a foundation for the children's academic lives. So perhaps it's fitting that the latest project—STEM (science, technology, engineering and mathematics) kits for 175 child-care programs in the region—is a pillar of support for budding brains, allowing them to explore scientific concepts through play.

"Children are so open-minded," says Bill Irwin, past secretary for the Kiwanis Club of St. Catharines, Ontario, one of several clubs involved in the project. "It starts with 3-year-olds, and we hope it'll pay off 12 years from now when they graduate from high school."

Only about 27 percent of students in Canada are engaged in STEM-related studies after high school. And while the demand for qualified personnel in STEM careers has increased dramatically, the percentage of applications for post-secondary education in these fields has decreased since 2001.

The STEM project is the third the Niagara-area Kiwanis clubs—including St. Catharines, Welland and Stam-

ford—have implemented since 2007 in partnership with the Early Childhood Community Development Centre, funded in part by an Ontario Trillium Foundation grant. What started as Kiwanians reading at day care centers turned into a project providing books to 140 centers; then a two-year project to send numeracy kits to 150 centers, allowing teachers to teach children about time, ages and other such concepts.

When asked for future project ideas, the teachers' feedback overwhelmingly favored science materials. So the STEM project was developed by ECCDC staff and Kiwanians who were former

kindergarten teachers. The kits contain magnets, test tubes and other such items for children to play with. The project also funds curriculum training for early childhood educators.

"Teachers themselves are thrilled," Irwin says. "No matter where you go, they're so happy to have this material to use with the kids."

"It's been an honor for our team at the ECCDC to work collaboratively with Kiwanis to offer Niagara's early years educators innovative tools to inspire children's play, curiosity and discovery," says Lorrey Ariel Bonilla, ECCDC's executive director.

