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Hundreds of Children Programmers Gather for First International TurtleArt Day

CAACUPÉ, Paraguay, October 15, 2013 - Sugar Labs(R), educational nonprofit provider of free and open-source learning software for children, is proud to celebrate TurtleArt Day [1] in Caacupé, Paraguay, with 275 students, their parents, and 77 teachers. They were joined by educators and Sugar developers from 8 countries throughout the Americas and as far away as Australia. Additional TurtleArt Days are planned for Peru, Costa Rica, Argentina, and Malaysia; the next will be October 15th in Montevideo, Uruguay.

Caacupé has been the focus of a one-to-one learning program run by Paraguay Educa [2] since 2008. The foundation is active in 35 schools, working with 365 teachers and 9,700 children. The children of Caacupé live in areas with high poverty levels: 60% of them are street workers and most have at least one parent living abroad. Much of the coordination was done by "Evolution" children, youth leaders in Caacupé who attend school in the morning, teach in the afternoon, and on weekends supply technical support to school programs.

TurtleArt is a programming environment with a graphical "turtle" that draws colorful art based on snap-together elements. Its "low floor" provides an easy entry point for beginners. It also has "high ceiling" programming features that challenge the more adventurous student. TurtleArt's roots are in Logo, the first programming language for children, created by Seymour Papert, Wally Feurzeig, Daniel Bobrow, and Cynthia Solomon in 1967. Logo's friendly turtle, which relies on instructions from children to move, has inspired adaptations from Logo for the Apple® II to Lego® Mindstorms®, TurtleArt, and Scratch.

An international group of TurtleArtists travelled to Caacupé with the generous support of BBVA Bank to launch the first TurtleArt Day. Also participating was EduJam! [3] attendants, a group of developers who work on open-source educational software. Caacupé's participants enjoyed workshops to create TurtleArt projects; interactive programming that involved robots and sensors; and discussions where educators and children shared their experiences.

"Logo was designed to be 'mathland'; TurtleArt is 'artland', says Artemis Papert, co-creator of TurtleArt. "It allows us to bring together art and programming. While you do art, you also do programming, math, and geometry -- the tools you need while focusing on doing art. We have observed that artists become more comfortable with programming and programmers become more comfortable with art when they use TurtleArt."

Brian Silverman, co-creator of TurtleArt, observed: "I was amazed at the passion of the children that came to TurtleArt Day. They were wildly enthusiastic and maintained their focus for six hours. They came to the event having had only rudimentary experience with TurtleArt and they left having more understanding about its artistic potential."

Cecilia Rodríguez Alcalá, Executive Director of Paraguay Educa, said, "The aspects of TurtleArt

Day highlighted by the Evolution team included cultural exchange between the children and the international community, and children teaching each other, pursuing their personal interests, including projects involving physical-world interaction."

Claudia Urrea, an educator and member of the Sugar Labs Oversight Board, said, "With TurtleArt, the children enjoyed programming the robots and using sensors, creating artistic images, engaging in the concrete use of mathematical concepts such as variables and random numbers, realizing how quickly the pace of their learning evolved, and discovering the multiple applicabilities of computation."

Andres Aguirre of the Butia project, a robot programmed with TurtleArt, said, "Even though the children had limited time to use the robots, they were able to experiment with some high-level programming concepts such as conditionals and control structures."

[1] http://turtleartday.org

[2] http://www.paraguayeduca.org

[3] http://ceibaljam.org

About Sugar Labs®: Sugar Labs, a volunteer-driven, nonprofit organization, is a member project of the Software Freedom Conservancy. Sugar Labs coordinates volunteers around the world who are passionate about providing educational opportunities through the Sugar Learning Platform. Sugar is installed on more than three million computers. Sugar Labs is supported by donations and is seeking funding to accelerate development. For more information, please visit http://www.sugarlabs.org/press or contact pr@sugarlabs.org.

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