

sugarlabs News

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Turtle Art Days Around The World

by Walter Bender, SLOB



by Walter Bender, in Nepal



by Rabi Karmacharya, in Nepal



by Ruben Rodriguez, in San Antonio, TX

Through the generosity of the Trip Advisor Foundation, and with the help of Larry Denenberg, we have celebrated Turtle Art Days in 13 countries over the past two years. We use Turtle Art Days as a means to promote programming as a core pedagogical construct. Another important goal was also achieved: programming is not just in service of geometry, but also in service of whatever passion drives the child by using sensors, robots, 3D printers, multimedia, etc.

Our first International Turtle Art Day, on October 12, 2013 exceeded my expectations. Educators and Sugar developers from eight countries throughout the Americas and as far away as Australia worked with 275 students, their parents, and 77 teachers. Pacita Peña and Cecilia Alcalá hosted the event. Brian Silverman and Artemis Papert joined us as featured guests and led workshops to a room full of enthralled children. Other workshops included robotics using TurtleBots led by Martin Abente, Andres Aguirre, and Alan Aguiar, sensors and multimedia using Turtle Blocks led by Claudia Urrea and me, and a seminar for teachers about pedagogical framework for Turtle Art led by Tony Forster. We were assisted by "Evolution" children, youth leaders in Caacupé who support school programs. While I have come to expect that children will deeply engage with Turtle Art, the fact that they maintained intense focus for three consecutive two-hour workshops, 70 to a room, with only short breaks, was unexpected. Many thanks to Mary Gomez, Pacita Peña, Cecilia Alcalá, and the Paraguay Educa team for all of the work they did to make the day a success.

Here are a few highlights from some of the other Turtle Art Days events.:

* In Montevideo's teacher-focused event, Andres and the Butiá team, used advanced blocks, and turtle mathematics to implement inter-robot communication by taking advantage of some new collaboration blocks in Turtle Blocks (ported to TurtleBots). We mapped the accelerometer from one machine to the motors of another to make a remote-control steering wheel.

* in OLE Nepal's event, the children sat in a circle on the floor and we had the Butia go forward until it got to the edge of the circle. Whomever the Butia approached had to push a button so that the Butia would spin and then go in another direction. We then added a few embellishments: the Butia would say "ouch" or "that tickles" when the button was pushed. We pushed the button and saved the files so we could use them to make an animation in Turtle Art.

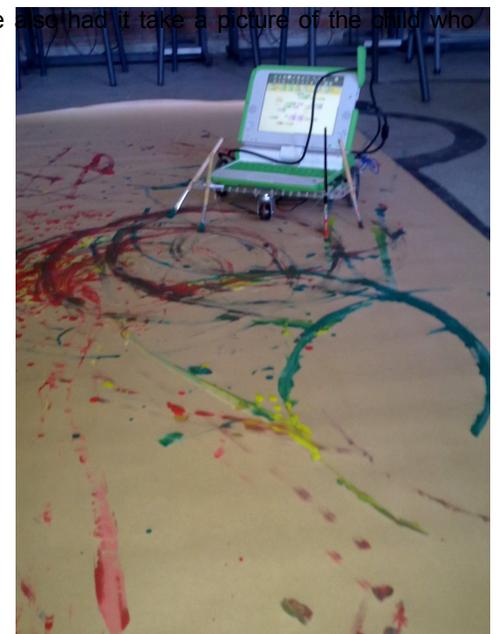
* Also in OLE Nepal's event we used a new "show" block to create Turtle Art animations of dances. The students recorded their own dance steps using the Sugar Record activity and then used those images to make Turtle animation projects with "show image", "wait1", "show image", "wait 1"

* In India, we participated in a "hackathon" where teams worked on different project ideas. My team worked on an extension of Turtle Blocks that opens up the opportunity to explore the power of "big data" by providing a "Cloud-service" for data collection and a new Turtle Block, "fetch", for programmatic access to the data. We built a working prototype: an Arduino-based weather station that feeds data to the Cloud and the client-side Turtle code. At the end of two days work when we showed our work, the reaction to our project was to ask, "Isn't programming hard?", to which I had an opportunity to quote Marvin Minsky: "Learning is hard fun."

It is great that there is a growing community of educators working with Turtle Blocks, sharing ideas and a passion for programming and expression...

If you would like to read more about the other workshops held in the past two years go to <http://bit.ly/1OUxmW0>

To learn more about Turtle Art in general, go to: http://wiki.sugarlabs.org/go/Activities/Turtle_Art



by Andres Aguirre, Uruguay