Bringing Design Thinking to Kindergarten

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Kindergarteners are smart. Kindergarteners love to think. And, kindergarteners love to solve problems. That is why they feel at home in Graland Country Day's newly designed 20,000 square foot Gates Innovation Lab.

Our director of innovative learning, Martin Twarogowski, also known as “Mr. Tinker,” creates learning opportunities that encourage children to think outside the box. During a recent “tinker” lab, kindergartners accepted the Marshmallow Challenge: How high off the table can you get your marshmallow using two paper cups, ten straws and unlimited tape?

The goal was important, but what was more important was the collaboration and the sharing of ideas. Working in groups of three, could we listen to each other? Could we work together? Could we determine what needed to be done? Could we solve some of the challenges that arose?

Here are some of the questions we overheard while kindergarteners worked on the project:

“How do we make this secure?”
“How can we make this heavier?”
“Will tape help keep the cup from falling over?”

These conversations are impressive because students are learning skills that will be needed in their futures. At the same time, they are excited and motivated to do challenging tasks. Mr. T. has scaffolded the tasks so they are a bit more challenging each time, allowing the students to build on what they have learned. In the Gates lab, kindergarteners have created fruit with LEGO® pieces, designed circuits using bananas, made telephones and even developed their own computer codes. These activities involve all kinds of thinking strategies and language skills as children articulate their ideas.

In the Gates Innovation Lab, students tinker with materials and ideas as they explore and grow. Each day is a new adventure that opens the door to learning, creativity and exploration.