

Carnegie Mellon University Children's School
Classroom Observation Session for students in
16-223 Creative Kinetic Systems
Wednesday, October 10, 2018

Making Things Magic – Part of the joy of working with children is evoking wonder and delight. Computation is an invisible resource that we can embed within artifacts to give them new and surprising behaviors, and so the challenge is finding ways to evoke delight by blending the tangible and the invisible.

The Children's Museum of Pittsburgh provides innovative museum experiences that inspire joy, creativity, and curiosity.

The primary objective is to inspire wonder and delight through the magic of embedded computing. Some ideas for possible forms that projects might take:

- An artifact that visitors handle, manipulate, or wear.
- A fixed installation or wall-mounted system, either intended for direct contact or remote interaction.
- An unobtrusive environmental intervention that creates responsivity in a space.
- A system of components related to making or building that visitors use to create or explore.
- An everyday artifact that children might use in their daily lives.

Consider how to go beyond momentary wonder and delight to engage children's curiosity and creativity.

According to Erik Erikson (developmental psychologist / psychoanalyst), children's primary objectives in childhood are:

- **AUTONOMY** (toddler/preschool) *I can do it MYSELF!*
- **INITIATIVE** (preschool/kindergarten) *Let's try ... MY idea!*
- **INDUSTRY** (kind/elementary) *Look at MY accomplishments!*

Consider how your projects align with children's objectives.

At the Children's School, observe the children's interest, attention, and engagement with the various activities, adults, and peers they encounter.

Age Level Being Observed: 3's 4's K (Circle One)

• What sparks / catches children's interest? What did not?

• What holds children's attention? What did not?

• What engages children's curiosity and creativity?

• Which of the children's objectives for autonomy, initiative and industry are related to the engagement you observed?

What can you do in your project to extend the moment of delight so children can engage more fully and explore more deeply? How can you promote children's experience of autonomy, initiative and industry?