

Reflections on Data Collection during Toy Prototype Development in a Design Studio Course

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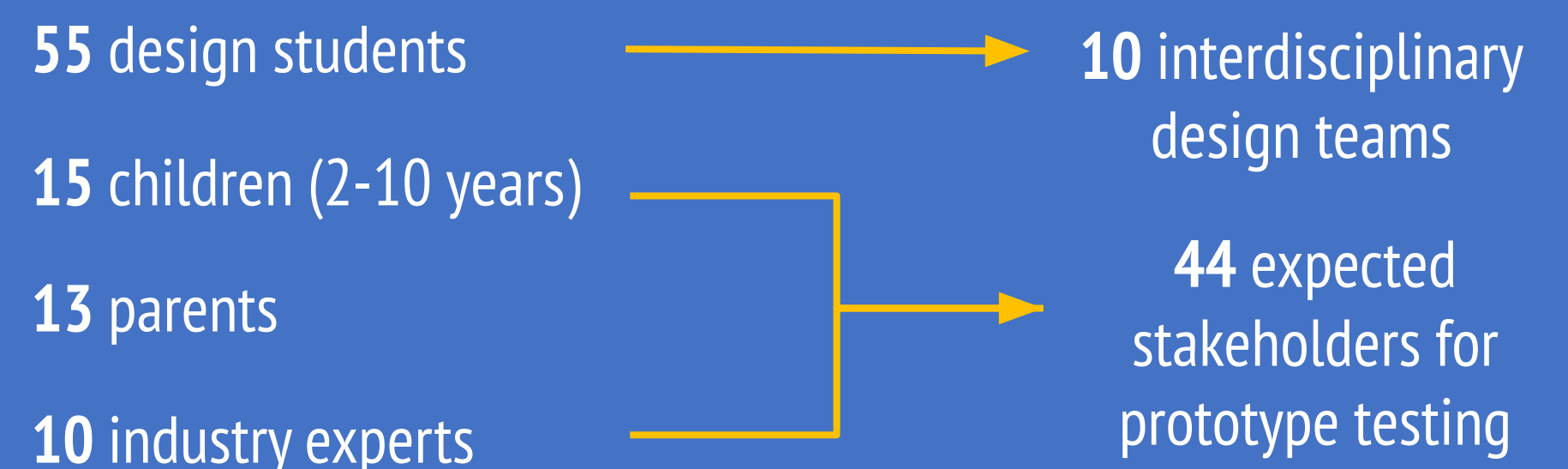
Including Children in the Design Process

This work-in-progress study reports the learnings and challenges of data collection procedures with children during toy prototype development, as part of a larger study around engagement with multi-stakeholders during the design process. Historically, children's voices have been left out in toy product development where designers relied on child development experts and parents to provide insights into how children interact with a design. However, with children's increasing role in toy product development, they are quickly filling various roles such as design partners, informants, testers, and users in participatory design. This research aims to continue to fill this void by providing some guidance and best practices for engaging with children during the design process.



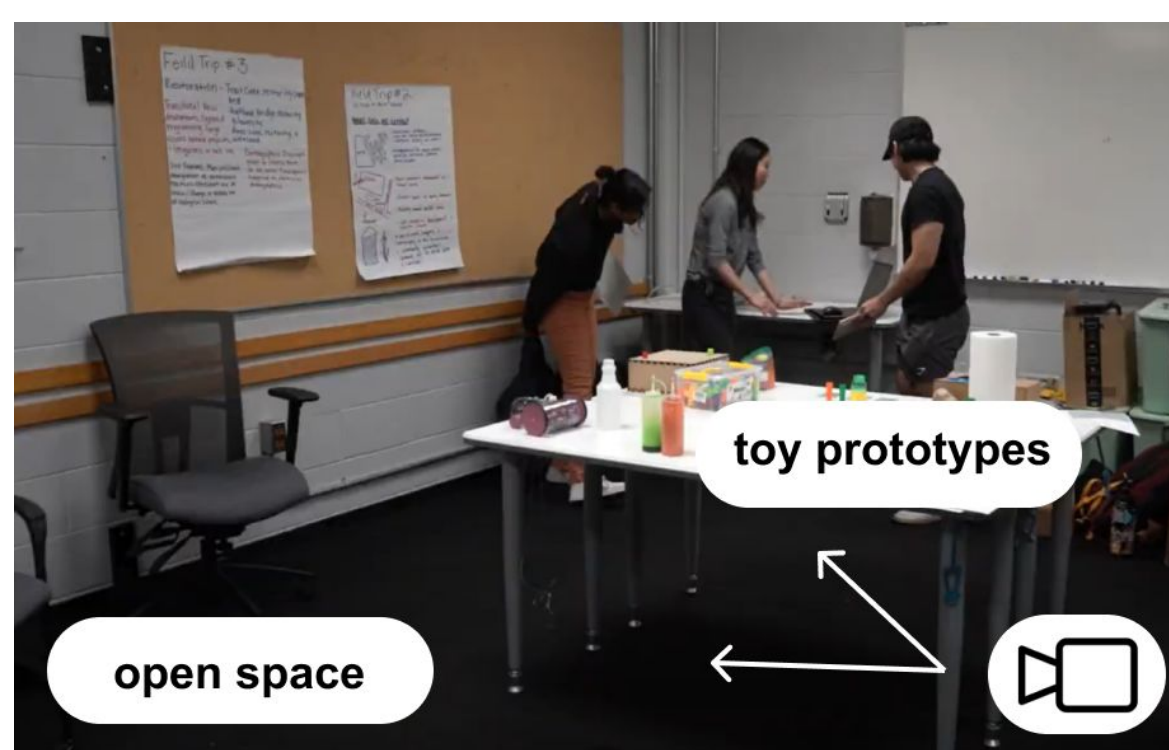
Play & Usability Prototype Testing Sessions

In a unique client-sponsored product innovation course, 10 interdisciplinary design teams collaborated to research, ideate, prototype, and evaluate toy prototypes across a span of 16 weeks through 3 main prototyping checkpoints.



~ 100 participants overall, engaged in toy prototype interactions

Play & Usability Testings



Reflective Prototyping Surveys

Which stakeholder group did you test with?

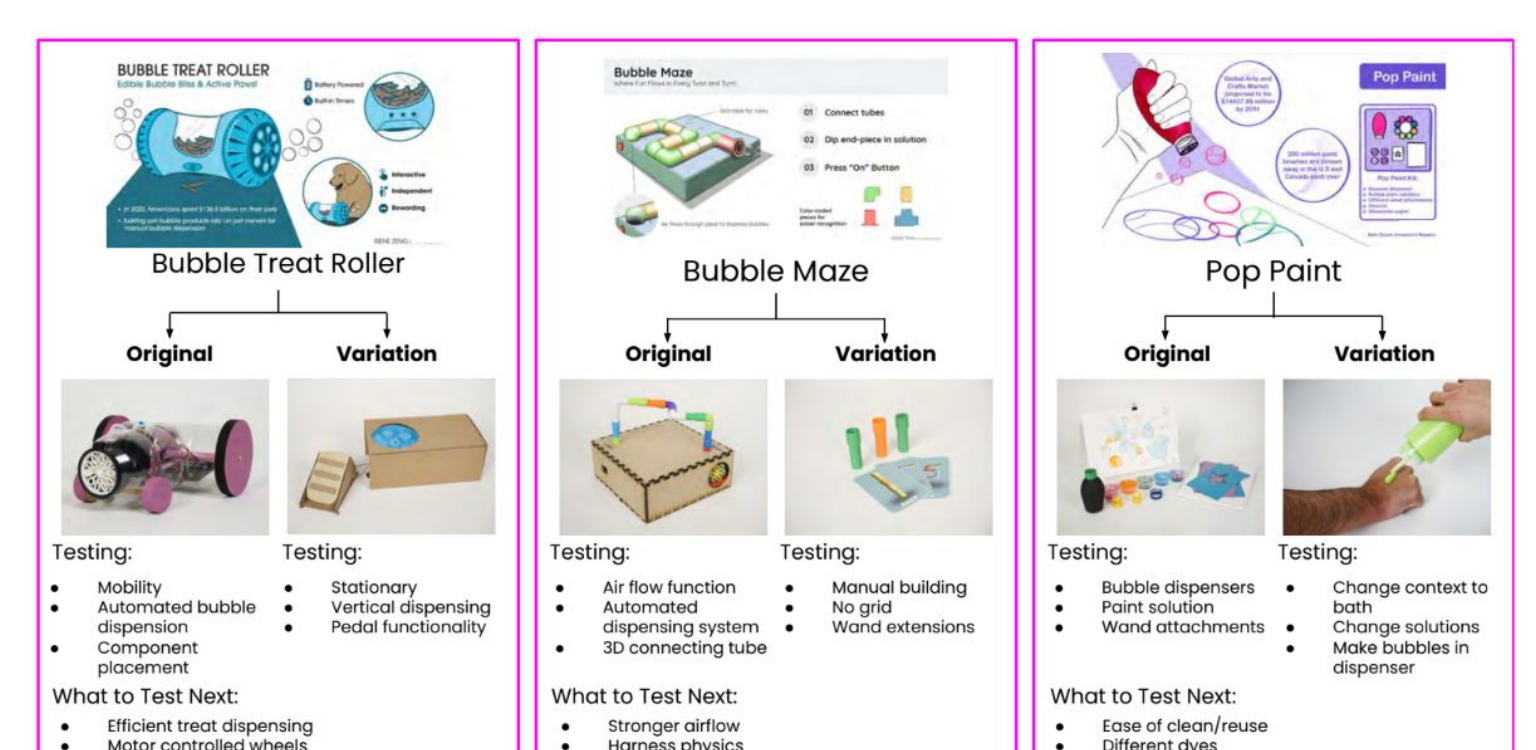
Only fill out this form for 1 stakeholder testing 1 prototype at a time. Reminder you will fill out this form 18 times for the Initial Prototype Models.

☐ Children (end-users)
☐ Parents/guardian
☐ Industry expert
☐ Other:

What were you hoping to learn from this testing session with this model? *

Your answer:

Checkpoint Presentations & Documentation

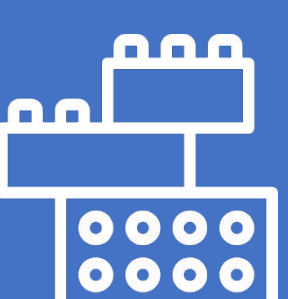


Data Collected: First & Second Checkpoint



First Checkpoint

- 20 play/usability testing sessions recorded
- 10 team presentations
- 60 prototypes created (6 per team)
- 187 survey responses (stakeholders' prototype feedback)
- 55 survey responses (individual team testing reflection)



Second Checkpoint

- 20 play/usability testing sessions recorded
- 10 team presentations
- 20 prototypes created (2 per team)
- 61 survey responses (stakeholders' prototype feedback)
- 62 survey responses (individual team testing reflection)

Lessons Learned: Challenges & Complexities

1

Children require more time, attention, and flexibility, which hinders the rigid and controlled nature of the pre-scheduled testing sessions.

2

Although we provided incentives for participation such as compensation, snacks, and parking validation, we noticed how this did not necessarily alleviate the challenges of participant recruitment.

3

Design teams were not able to apply these skills and strategies directly without much training or practice even though best practices and guidelines for testing with children were provided with a class lecture.