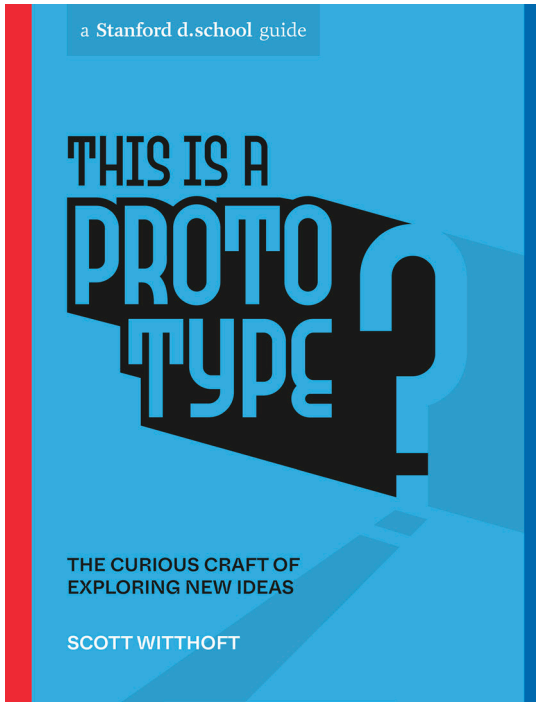

EDUCATORS' GUIDE

This Is a Prototype

Creating Experience Prototypes

How do you close the gap between *I wonder* and *I know?* You make a prototype. A prototype is a tool that gives you a chance to investigate your ideas and explore what could, should, or would come next, whether you are designing a new product, working out a new routine, or rearranging your furniture.

There are many forms of prototypes, from physical mock-ups to acted out scenes. Experience prototypes are just one of a whole portfolio of ways that learners can explore a question. No-build hacks are a type of prototype that actively ignore fancy technology in favor of simply setting a context. They are cobbled together with anything you have at hand. These prototypes often have some kind of tactile or sensory engagement so the participants don't just watch; they do or react to something—like setting a scene for a play.

This activity from *This Is a Prototype* by Scott Witthoft shows how making and question-asking can be key tools in learning, and how prototypes can be used to understand an idea, an early concept for something new, or a motivation. It has been adapted for use in both K12 and higher education classrooms.

Activity: The No-Build Hack

LEARNING GOAL

To help learners use improvisation to help them understand an idea, concept, or motivation. To help them deepen curiosity, let go of perfection, and explore for the sake of learning.

WHERE TO USE THIS ACTIVITY

In-person classrooms and workshops

MATERIALS

A space with moveable furniture | Simple prototyping supplies such as tape, printer paper, scissors and cardboard

FORMAT

Group work

INSTRUCTIONS

1. **Divide students into an even number of teams.**
2. **Have each team work on/decide on a question**. This question could be related to their course work, or an arbitrary question that is posed to help them understand the activity. Below are some ideas for questions that allow learners to experience prototyping unrelated to their work/project:

   What is a way to make the first (or last) day of school an interesting experience?

   What's a way you could teach something that's important to you to someone else? How could you use a prototype as a way to help someone learn about something important to you?

   What are three different experiences you could create to explore options for a new park on/near the street where you live?

   For educators: How might you prototype an experience for connecting family members into the classroom experience?
3. **Students should build something** that allows them to explore this question using only materials and furniture in the room. Encourage them to include anything that helps participants feel the essence of their experience, but they shouldn't fret over the functionality and infrastructure. Rather than fiddling with design details, they'll need to gather together what they can to simulate an exploratory experience instead of a single solution. Give them enough time to build, but not so much that they feel the need to refine (30 minutes max).
4. **When time is up, pair teams together** to explore each other's prototypes.

5. **The creators of the prototype should talk to the testers as they explore.** Prototyping isn't just about making things — it's about learning from what you've made. This requires asking questions and listening to answers. Opt for asking open-ended questions, such as:

How do you feel about this?

Is there something you would think about changing?

Can you tell me about the last time you experienced something like this?

6. **Give students an opportunity to reflect.** Try this prompt, which could be done individually or in their teams:

Connect something you heard to a question you'd like to explore next. What's something you could try to further understand something that was important to the people you prototyped with?

EXAMPLE OF A NO-BUILD HACK

A group of prototypers turned some basic furniture and piles of paper into an off-road vehicle to emulate a new tourism concept. The prototype featured a table covered with sheets of paper and a chair placed atop the table. This hacked-together configuration simulated an AI-directed vehicle intended to help people explore new adventures. To start the experience, participants "climbed into the Jeep," getting up onto the table to sit in the driver's seat.

The prototypers then used paper displays of adventure options to understand how people might make decisions on their own or with the help of the AI vehicle system. The objectives were not to create the best (or even a plausible) interface or the most efficient vehicle. The intent was to understand how people might navigate choices if such a concept existed.

WE'D LOVE YOUR FEEDBACK!

This educators' guide is a prototype (hooray!). We're hoping to understand what types of materials are useful to educators and learners in K12 and higher education classrooms. If you used this, please share your feedback with us in this four-question survey.

WANT TO READ MORE?

Check out *This Is a Prototype!* The book offers even more ways to test your ideas, ask questions, speculate about answers, and explore doing something new.

Learn about all of our d.school books at **dschool.stanford.edu/books**.

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