Literacy Research Association 2015 Presentation

IOI during Fabrication

I do have a lot of friends who have a lot of experience across a fairly wide variety of maker-y domains, and for the most part I try to at least scale up a little bit before I go and ask them questions, so I would rather sort of waste my hassling-them-time on asking them a smart question rather than ask them the really basic thing, but **when I get to a design question I don't know the answer to I will often Tweet about it or ask a dozen people about it** um because sometimes you know - **the person I will think is the right person to ask is not.**

-Jesse, keyboard maker

Communicating during Fabrication

Because of my particular community at the Exploratorium as an artist in residence and within the barrier, sort of creator, like the creative community **I have had the good fortune to meet people who have a wide range of capacities and abilities and I'm lucky to call some of them friends. I generally call upon my friends, it's usually not cold calls to strangers.**

-Kitundu, sound artist/instrument inventor

Creating/Traversing Representations during Fabrication

It started with a **sketch** from the woman that I'm doing it for and then I had to turn that into a **digital two dimensional drawing** to be able to start the CNC process which eventually turned into **a three dimensional model**. Then throughout that, as I was trying to learn how to do these certain things, I was having to both **tell the people in the shop about my problems and describe what was going on** and also having to **describe it through written word**, the internet to try to get specifics out of Google.

 -Jeff, woodworker

Problem Solving and Posing during Fabrication

It also means that we're not the only people who can fix a problem or extend the product. So one of the things, we believe pretty strongly in making, and the maker movement and so, very few keyboards let you change their firmware. So if you want to back a keyboard either have crazy macros or pretend to be a mouse or you want to integrate a password manager into your keyboard or do things that I can't possibly - or have it start flashing at you when you make too many typos, that's a thing you can't do with many keyboards…

 The keyboard firmware is written in Arduino C and so if you are comfortable playing around with an Arduino, you'll be able to change how our keyboard works. On the software side that's how we do open. On the hardware side, well so the way we describe it is all of our keyboards come with source code and a screwdriver.   –Jesse, entreprenuer/keyboard maker

Documenting during Fabrication

I used to - I made this mistake in the first couple of products that I ever made where I only took like progress shots, um, after I had finished a process and like, "Look what this hat did." Like, "Look what this process did." **Um, but it turns out that the final product doesn't really give a lot of insight as to how much work you put into it.** And what all was necessary to do it. **Like, you look at that helmet, you can't imagine what the mold looks like, you can't imagine how long it took. Um, you can't imagine like what it looked like when it was a sad, plastic, white thing.** Um, and so, **just taking pictures of the entire process has been incredibly useful.** Uh, it also forces you to be like, "Fine, I'll wash all this chemical epoxy off my hands and go take a picture now." It's arguably better for your health.

-Helena, Daft Punk Helmet