Rapid Prototyping
~ a hands-on modelling technique for bringing fresh thinking to solving a problem

The Purpose

Rapid prototyping forces us to start creating ideas to problems we're stuck on.

The goal of building a physical model or *prototype* in this activity isn't to get an accurate representation of the solution, but rather to force us out of our heads and off our computers and into working with our hands. This helps us see things from a different perspective and beyond our existing thinking and assumptions that can keep us locked down into old unproductive ways of looking at things.

Plus, we create something to help us to more powerfully communicate and engage other people in our ideas and potential solutions we want to make with them.

The Process

Ignition

Think about a challenge or a problem you're dealing with or a new idea you would like to make happen. Then follow the steps below to start coming up with new solutions…

Step 1: Immersion

Time: 5 Minutes
Start by reviewing all the information you have about the problem at hand, and taking notes (using on post-it notes so you can work with them in a minute).
❖ *Where are you now?*
❖ *What do you know about what people want or what could be improved?*
❖ *What are any other people doing that you like?*
If it's not something you feel you have lots of personal experience with, you could also sneak a look into a phone or computer (for this step only!) and quickly scan any research that's already been done in the area, such as user surveys or articles reporting on data on the subject you're discussing.

Step 2: Insights

Time: 5 Minutes
Next, you want to review your notes and look for connections within them.
❖ *Are there common threads that stand out?*
❖ *What ideas group together into a bigger concept or theme?*
❖ *What surprising things stand out to you?*
This is where the sticky notes really come in handy, as you can start to move and group similar ideas to help you draw those connections.

Step 3: Strategy

Time: 10 Minutes
Now, with all of this data, it's time to brainstorm as many ways as you can come up with to address your problem. You want to come up with a *lot* of ideas, and not be held back by anything that sounds "too crazy." Keep squeezing out more ideas by asking:
❖ *What else?*
❖ *What else?*
❖ *What else?*

Step 4: Design

Time: 15 Minutes
Now, it's time to roll your sleeves up! Choose one of the strategies you find interesting and make a prototype or model of it: **what might this idea look like?**
Depending on what you're working on, prototypes can take a lot of different forms: a storyboard, a three dimensional map or diagram, or a physical model or sculpture. The prototype you create isn't supposed to be perfect or functional. It just needs to tell the story of your solution in a way that's quick and easy for people to understand and that allows you to start seeing how your solution could play out in actuality.

<u>You can incorporate any of your own objects into your prototype if you want to.</u>

Step 5: Testing

Time: 10 Minutes
Now, it's time to show your what you've come up to others - partly to extend and unearth more of your own thinking, and partly to find out how your idea sounds to others.
❖ *What do they like best about you've come up with?*
❖ *What questions do they have about what you've come up with?*
❖ *What suggestions can they offer to add to or somehow improve what you've come up?*

Step 5: Incubation

Time: 10 Minutes
It can make all the difference if you can leave your idea alone for a while to let your unconscious thinking work away on it. Ideally go for a walk, or do something physical, visual or completely different for a while. Some people get their best ideas in the bath, others after taking a short nap. Whatever you do, try and give yourself some space and time not thinking about your idea, and not filling your head with too much other busy other thinking either.

The Aftermath

"It's not about what you've made, but what happens afterwards."

Take a fresh look at what you've created, and think about ways it could be improved or added to. Take it to people who may have an interest in your idea and get their thoughts and ideas. Go through this activity again to see what new solutions you can uncover.

Will the solution and design you come up with during this activity be the final answer to your problem? Probably not. But you will definitely have generated fresh ideas and new thinking, and you'll have a solid jumping off point to build on.

Whatever you come up, just doing this activity will help you get closer to your ideal solution, providing a springboard and opening up your mind to more creative thinking.