Tips for Designing & Testing Prototypes

Instructions: Once you have generated an idea, it is time to test the assumptions behind the idea about why the solution is going to meet the needs of your stakeholder. We test these assumptions through prototypes - rapid, simple experiments that do not require a lot of resources.

1 DESIGNING A PROTOTYPE

- Prototypes are quick experiments designed to test the assumptions behind the idea you generated. Your goal is to learn more about your idea not to validate your idea as correct.

- Good prototypes ask specific questions and create activities to help you find the answers to those questions.

- Good prototypes do not require a lot of time investment to prepare. When designing your prototype, think of all the ways that you can test your assumptions without spending a lot of time planning and preparing.

- Good prototypes do not require a lot of money. When designing your prototype, think of all the ways you can test your assumptions without spending a lot of money or using a lot of resources.

- Good prototypes are small. Here's an example: if you want to test a prototype of a 100 person event, start by throwing a party for ten. Eventually you will need to make your prototypes closer to the size of the full implementation of the idea, but in the beginning test those assumptions with a small group. If you want to create a solution for an entire grade level, start with engaging three or four students. Then test the solution with a whole class. Then move to testing the solution with the entire grade level.

- By starting small to test assumptions and get information about whether your idea will meet the need of the stakeholder, you are giving yourself room to have an idea fail or need major changes before you proceed. When you launch an initiative at scale, you have less room to pivot or change course.

- Good prototypes should not feel risky. By starting small, you are engaging a group of trusted individuals to give you honest feedback before you scale your idea to the whole group.

- Good prototypes take place in the real world. Instead of mocking up an idea, take your small scale prototype to real stakeholders to try out.

- Prototyping is different than piloting an idea. Prototyping is about answering questions about the idea itself and how it will impact the stakeholder. Piloting is about figuring out how an idea will work once it is at scale.

2 TESTING A PROTOTYPE

- Be sure to focus your prototype around the questions you are trying to answer.

- Think carefully about who will test your prototype. Think about the stakeholder groups you need to engage. Think about those stakeholders who are underrepresented.

- Use the tools in this phase to make a plan for what will happen, what you need and who will help you test your prototype.

- After you test your protoype, be sure to take time to interview your participants to ask them what they liked, what they didn't like and how the experience made them feel.

- Ask them to think about the prototype as a solution that you implement in the future.
  - Would they enjoy participating? Why or why not?
  - Would this solution solve a problem they face? Why or why not?
  - Would this solution meet a need they have? Why or why not?
  - Be sure to ask them if there is anything else they would like to share.

- Based on what you learn from your participants, make iterations to your prototype and try again. Prototyping should be a rapid process of quick, low investment experiments.

3 REFLECTING AFTER THE TEST

- After you have completed the test of your prototype and have interviewed the participants, be sure to take some time to reflect and analyze the prototype of your idea.
  - What worked about the prototype? How well will those things grow into a full solution?
  - What didn't work about your prototype? What will you do to make changes?
  - What new questions arose for you during the test of your prototype? What will you do to learn the answers to those questions?
  - What ideas came up for you as you were testing your prototype and talking to your stakeholders? How might you incorporate those ideas into the next iteration of your prototype?

- Think about how your prototype will meet the needs of your stakeholders. Think back to your Point of View statement and reflect on how your idea will meet the need you identified.