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This Human Centered Design (HCD) Packet is used in our Precollege Programs’ virtual lesson for educators “**Human Centered Design – Masks and Backpacks.”**

The Packet can be applied to anything YOU decide to create!



What type of product are you creating/improving?

Use this space to jot down some quick ideas about your product. It may help to include a basic image.

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| **Notes:** | **Sketch:** |

Who will use your product and what do they care about?

**Connecting with your users!**

Some ways to get inside the mind of your user are: interviews, observations, and research. You should also come up with a plan to incorporate user feedback throughout the design process when possible.

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| **Who will use your product (age range, purpose, etc.)?** | **What is important to your user(s)?** |

**Understanding the problem and solutions from the user’s perspective!**

What problem are you trying to solve with your product? How will you know when you have solved it? It can be useful to create a list of criteria for the design and rank the user’s wants/needs.

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| **What problem will your product address?** |
| **What does your user need/want from the product (e.g. materials, functionality, etc.)?** |
| **How will you know when you have been successful?** |



**Considering radical ways to design a solution (product)!**

How can you think about your solution (product) differently? How creative can you be with your product version? Some ways to help with the creative process are: brain spins, brainstorming, and SCAMPER (see below).



**Substitute** – Replace a thing, or concept, with something else

**Combine** – Unite! What? Who? Ideas? Materials?

**Adapt** – Adjust to a new purpose. Reshape? Tune-up?

**Modify, Magnify, Minify** – Change the color, materials, size, shape, etc.

**Put to another use** – Change when, where, location, time, or how to use it.

**Eliminate** – Omit, get rid of, cut out, simplify, weed out, etc.

**Rearrange, Reverse** – Change the order of things, including the plan.



**Applying Science, Technology, Engineering, and Math to invent something tangible, and then engaging in redesign to create an optimal solution.**

How do you know this is the optimal product for your user?

**Fail fast, learn fast**: Start creating and revising prototypes as soon as possible. The goal is to improve upon your previous design in order to make your product the best it can be!

\*Remember to keep your user’s wants/needs in mind!

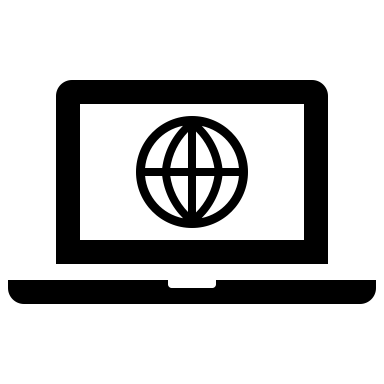


**Showing how the solution meets the needs of the user and marketing the invention!**

How did your test run go? Did someone else try it out? How did they like it?

It may be useful to keep track of a few things: what aspects of your product did you test, how did you test your product, any quick improvements. This is also the time to come up with a marketing pitch, a video, message, logo and anything else to help market your product.

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| **Any notes from your test-run? What went right/wrong?** |
| **How will you market your product (e.g. create empathy, make it fun)?** |
| **What were your user’s thoughts about the product?** |



To find the complete virtual lesson “**Human Centered Design – Masks and Backpacks”** and other lessons visit our Precollege Programsvirtual professional development page.

[**https://precollege.oregonstate.edu/virtual-professional-development-teachers**](https://precollege.oregonstate.edu/virtual-professional-development-teachers)**.**



