



DESIGN THINKING

Story design & testing

Dr. Jennifer Palilonis

November 29, 2017

5 Popular Design Thinking Strategies

1 UNDERSTAND

Empathy Research & User Personas

Empathy research can take many forms; the two most common are observation and interview.

- Observe users in natural settings to better understand the way they behave, react and solve problems.
 - Take detailed notes about what you observe and try to interpret what it means.
 - Take photos (if appropriate) and collect artifacts that help you understand the user better.
- Conduct semi-structured interviews to better understand how users think and feel.
 - Transcribe users' responses to your questions.
 - Ask follow-up questions to clarify or reveal additional information.
- Based on your research, develop personas (fictional characters) that represent a type of user.
 - Give your persona a categorical name.
 - Provide demographic info that includes information relevant to your project.
 - Develop a scenario narrative that describes how a persona would benefit from your project.

BLUE ROOTS PROJECT PERSONA

Category: Proactive Issue Sympathizer

Fictional Name: Daniel Rowland

Title/Responsibilities: Bike Shop Owner

Demographics

Male

24 years old

Married

From Washington, D.C.

Lives in Dearborn, Michigan



Goals and Tasks: Focused on being well educated about issues affecting his local community.
Educate others about issues affecting his local community

Environment: Avid News reader

Quote:

"My focus is letting people know that we can change the future. I want to make this a better place for my kids and



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DEFINE

Problem Statements & Mind Mapping

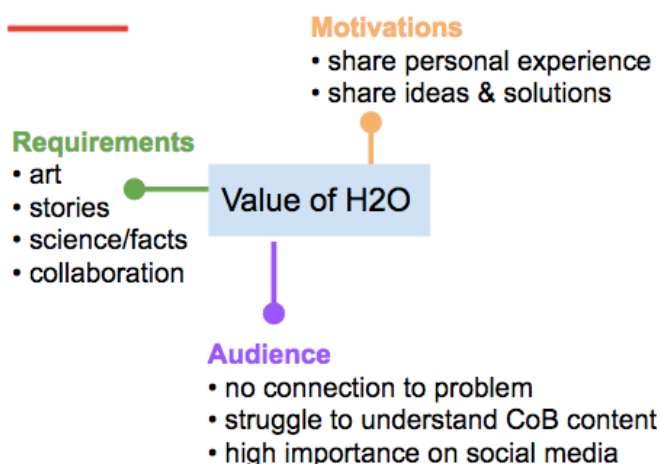
Instead of starting with a problem, design thinking starts with an observation.

- Write a one- or two-sentence claim that outlines the problem your project intends to address.
 - Problem statements should be specific, focused and grounded in provable facts.
 - Avoid “world hunger” problems, focusing instead on a tight, solvable problem.
- Develop mind maps that identify key themes and connections between them.
 - Unpack thoughts and experiences into tangible and visual information that inspires.

BLUE ROOTS PROJECT PROBLEM STATEMENTS

- Young people didn't know about their water sources and they didn't care much about crisis because it doesn't affect them directly.
- Circle of Blue provides valuable public information about environmental and water news; however, it can be difficult for people unfamiliar with those issues to synthesize such information.

BLUE ROOTS PROJECT MIND MAP





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IDEATE

Divergence, Convergence & Saturate & Group

Ideation is about “going wide” on concepts and outcomes; it is “flaring” rather than “focusing.”

- Encourage participants to go beyond obvious solutions to increase innovation potential.
 - Recruit people from differing perspectives to harness collective perspectives and strengths.
- Diverge: Develop one or more prompts intended to focus idea generation.
 - Prompts can take the form of “How Might We” questions or other action-oriented statements.
 - Provide 3 to 5 minutes for participants to come up with as many ideas as possible.
 - Ask participants to write responses on sticky notes, using one sticky note for each idea.
- Converge: When time is up, engage in guided discussion.
 - Request participants share their ideas one at a time; encourage brief discussion about each idea
 - Place each post-it on board.
 - Cluster related post-its and give each cluster a thematic title.
 - Engage in additional discussion about each cluster if necessary.

BLUE ROOTS PROJECT SATURATE & GROUP PROMPTS

■ *How might we enable our audience to share personal stories about the value of water?*

■ *How might we leverage the power of social media to engage a global audience?*

■ *How might we encourage participants to consider the ways in which people from other countries and cultures experience water?*





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PROTOTYPE

Crazy Eights & Iterative Prototyping

Use results from the ideate phase to generate insights and visualize potential solutions.

- Engage in “participatory prototyping” with members of the real audience.
 - Sketch as many ideas as you can with no regard for cost, resources or other similar constraints.
- The prototyping process should be iterative.
 - Test concepts with stakeholders and then improve the fidelity
- Consider low, medium and high-fidelity prototypes at various stages of the project.

BLUE ROOTS PROJECT PROTOTYPES





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VALIDATE

User Experience & Concept Testing

Show concepts and low-fidelity prototypes to representative users to get feedback early.

- Consider A-B testing that asks users to compare two concepts/prototypes.
- Walk representative users through the experience, asking them for meaningful feedback along the way.
- Encourage users to be honest and provide robust, detailed critiques.
- Choose the ideas that “test well,” improve the fidelity, and test again!

BLUE ROOTS PROJECT VALIDATION



Low-fidelity concepts and prototypes were tested with college students in our lab.

The team tested mid-fidelity concepts and prototypes at a “Greening of the Statehouse” event in Indianapolis.

