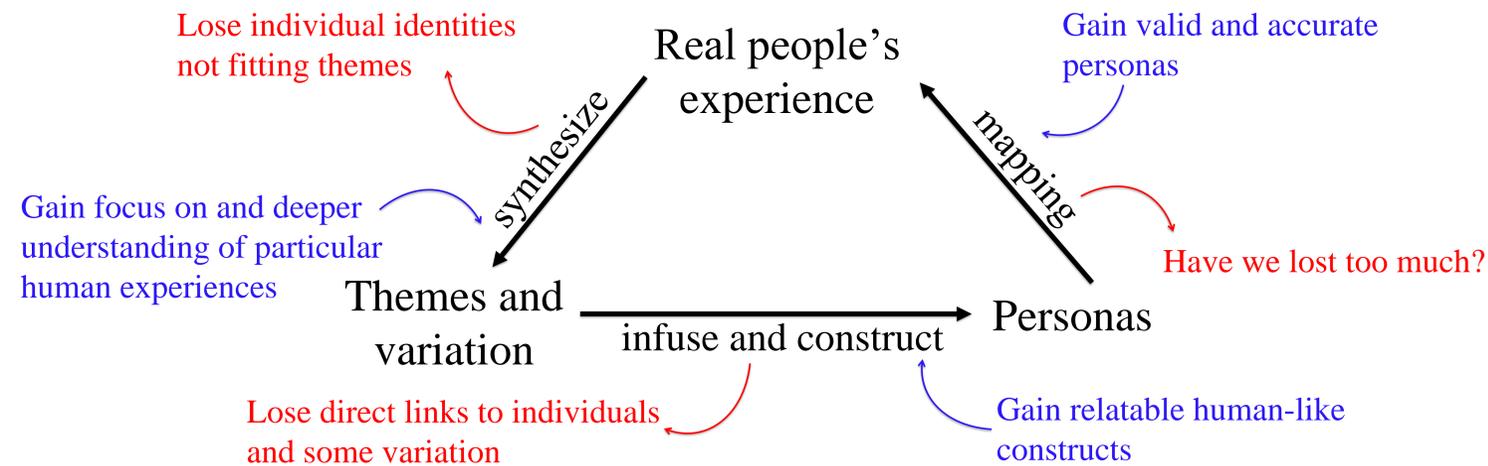




How do we design a research program that better engages undergraduate students?

PERSONA

Goal-driven, life-like archetypes



Context – Data collection

- Semi-structured interviews with middle-level undergraduate physics students
- The interview protocol draws on identity formation, epistemological sophistication and metacognition

Why

- User-center design
- Protect anonymity
- Avoid superfluous details and stereotypes
- Means of communication and data representation



Louis

“I want to go to grad school.”

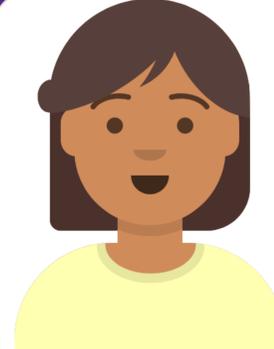
- Aspiring scientist
- Research is significant to a scientist
- Research – Grad School – Professional career path
- Wants to learn research skills, discover research interests, develop competency for Grad School
- Frustration with research activity or self-efficacy



Maria

“I want to see what it is like.”

- Many academic and non-academic interests
- Research is somewhat important to a scientist
- Open to future career options
- Engages in research for the joy and self-exploration
- Time and self-commitment



Ashley

“I want to work with these people.”

- Ambivalent physics background
- Commitment to the field is important to become a scientist
- No commitment to physics until having a great class or mentor
- Wants to learn and work with her favorite people.
- Struggles with self-efficacy, approval, and belongingness



Brian

“I want to get a good job.”

- Physics engineering major
- Research helps with getting experience for better job
- Job seeker, nontraditional student with financial burden
- Wants to learn skills to get better job after graduation
- Financial difficulty and research’s value concern