



Harnessing the Power of Data through Design Thinking

@AchieveTheDream #HolisticStudentSupports @JuliaLawton2016

WHY ARE YOU HERE?

1. Learn the basics of design thinking
2. Refresh or deepen my existing understanding of design thinking
3. No clue, but it sounds great!

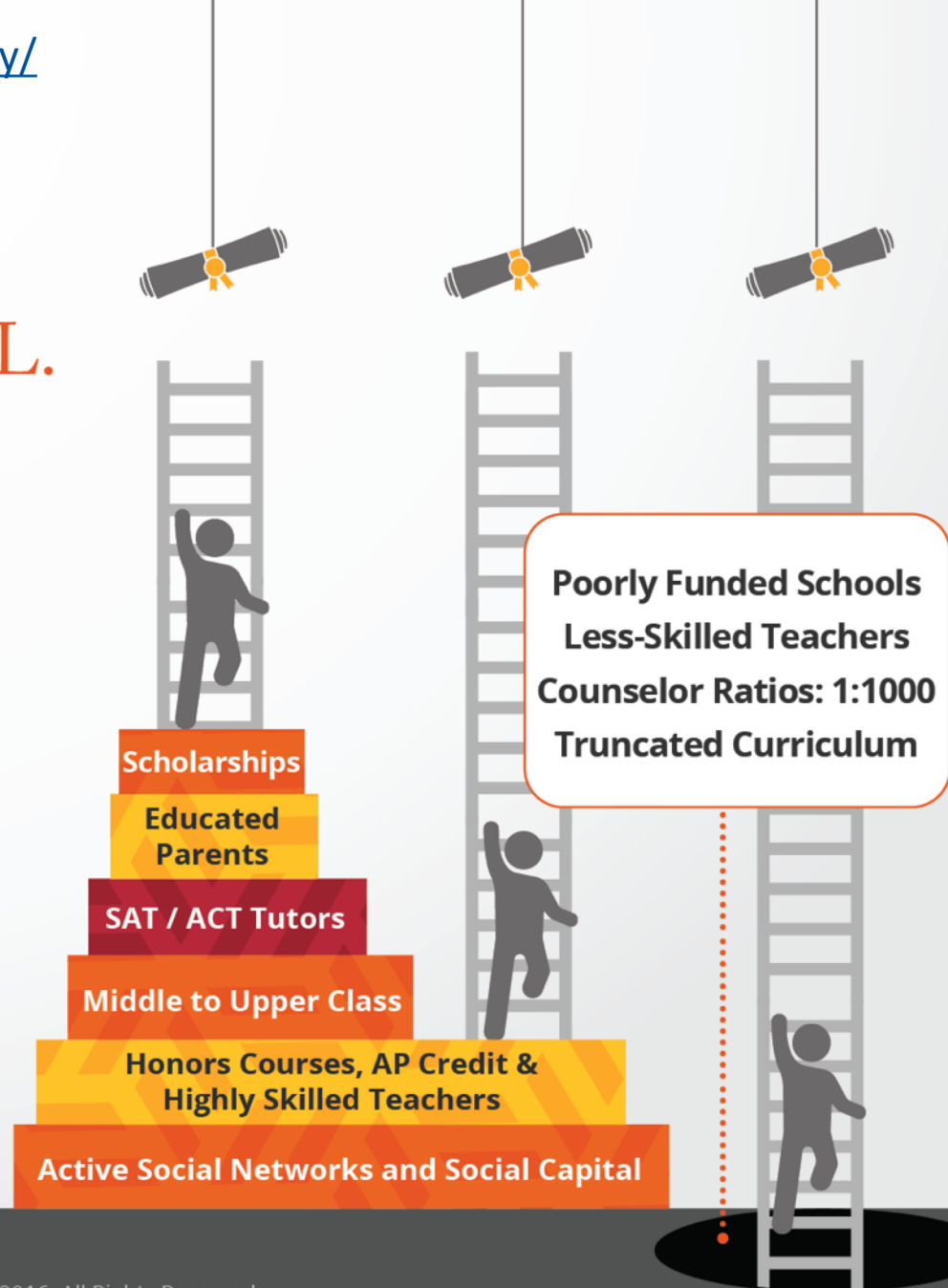
LEARNING OUTCOMES

1. Develop a foundational understanding of the design thinking process and some of the tools it offers.
2. Understand how student-centered design can be a tool to address systemic equity issues.
3. Have a language and framework with which to solve problems and generate creative ideas.

You are a designer!

The “achievement gap” is the natural outcome of a biased education system (among other systems) that was not designed to allow and support every student to succeed. It can, and must, be redesigned.

But the world
ISN'T EQUAL.

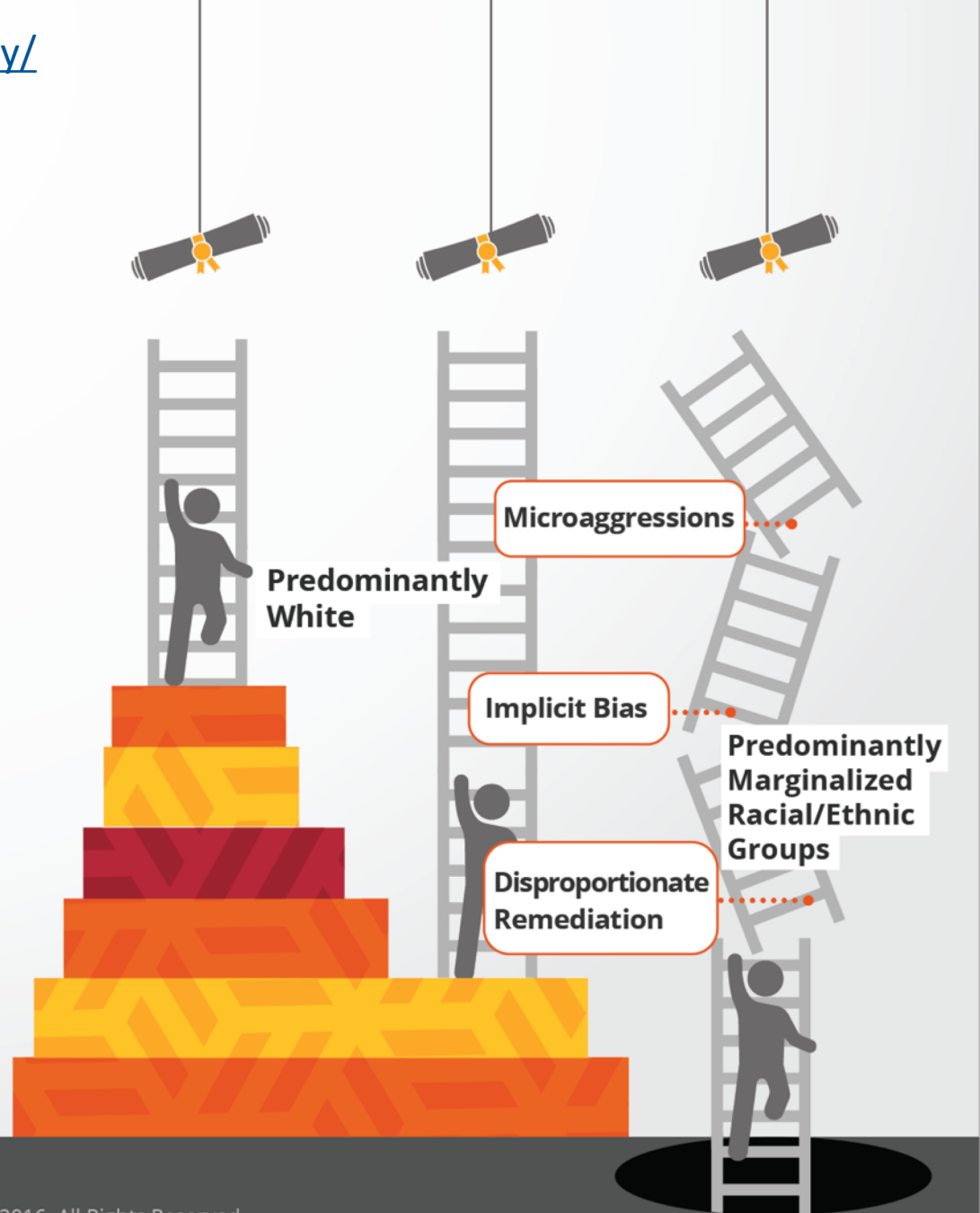


And it has

BIAS AND SYSTEMIC RACISM.



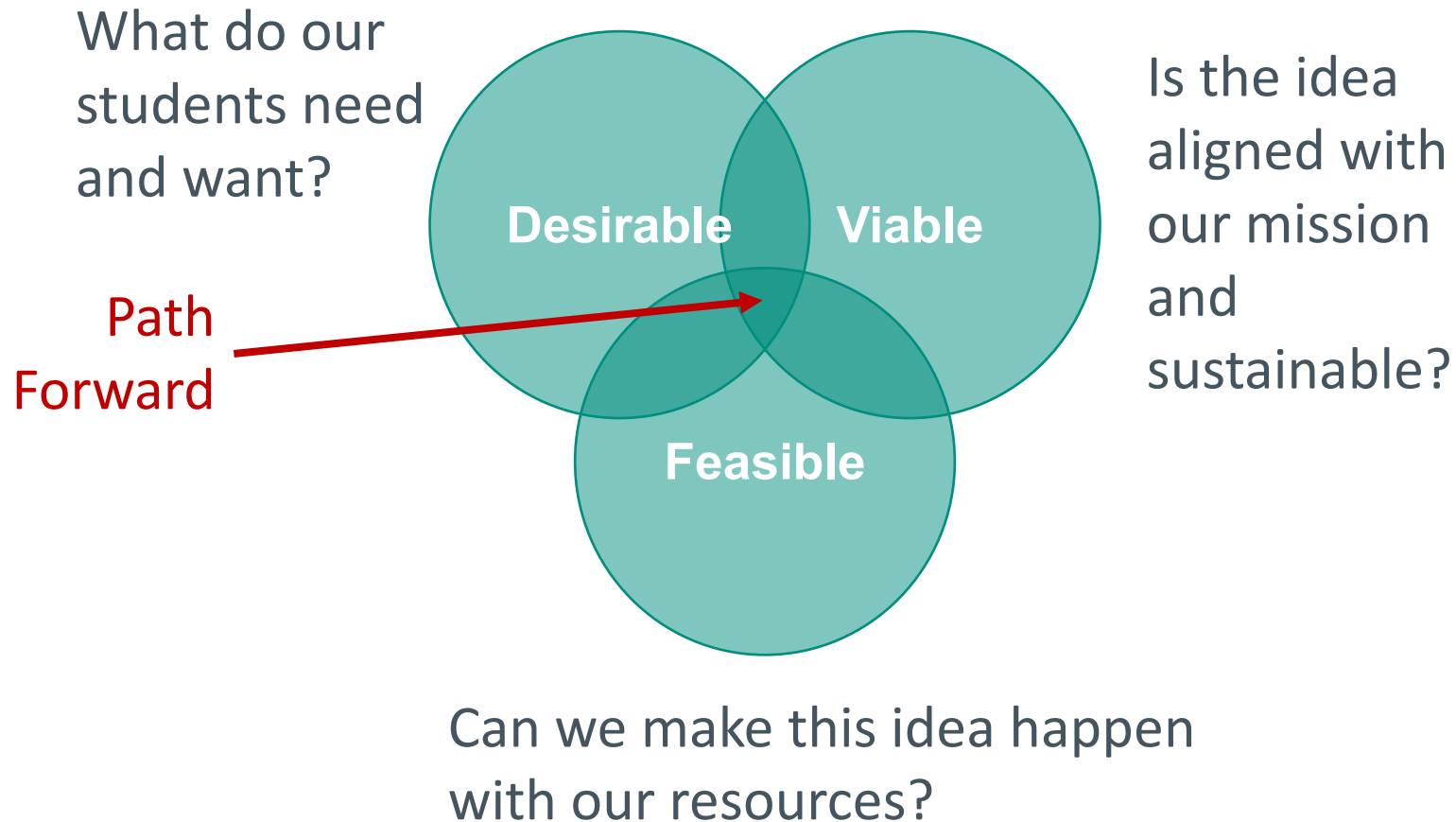
CENTER *for* URBAN
EDUCATION



In contrast, **EQUITY** redirects resources to the pathways with greatest need to fix barriers and intentionally provide support.



WHY DESIGN THINKING?



THE DESIGN THINKING PROCESS

A Protocol for Solving Problems and Identifying New Opportunities



What and When?

Create a design
Brief outlining
the project



What Is?

Issues and
challenges

Empathetic
understanding
of student
point of view



What If?

Brainstorm
options for
creating the
ideal student
experience



What Wows?

Identify best
option(s) for
further
exploration in
what works



What Works?

Rapid
prototyping

Testing and
refinement



WHY DESIGN THINKING?



<https://foursquare.com/v/habitat-for-humanity-restore/4cc10303f82ebfb7eee46f91>

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WHY DESIGN THINKING?



Good intentions
aren't sufficient
for good design!

https://www.reddit.com/r/CrappyDesign/comments/737rwk/this_habitat_for_humanity_van/

WHY DESIGN THINKING?



https://www.reddit.com/r/CrappyDesign/comments/73krjy/unhelpful_signage/

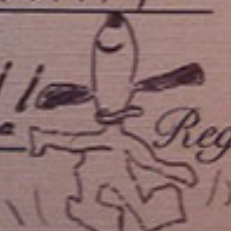




WHY DESIGN THINKING?

The favour of a reply is requested by June 8th

	<i>Chicken</i>	<i>Beef</i>	<i>Child</i> <i>(12 and under)</i>
<i>II Tom (uncle)</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>II Becky (Aunt)</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Joyfully Accepts  *Regretfully Declines*

Please list any dietary restrictions *Would prefer not to be seated near anyone who chose "child" under the menu preference. ->*

<https://imgur.com/gallery/ihFggdf>



STEP 1: WHAT & WHEN? THE DESIGN BRIEF



Approach #1: Identify a goal or challenge to solve

- *Reduce the % of students we lose from application through first day of class from 22% to 11%.*
- *Raise course completion rates for all student groups to at least 92%.*
- *Provide all colleges in our state with easy access to resources to support their guided pathways efforts.*

Approach #2: Provide guidance on the scope of the work

STEP 2: WHAT IS?



Understand/Empathize

Examine the impact of existing policies, processes, structure, and culture on students.

Explore interests, needs, and opportunities of your colleges.



Document & Discuss

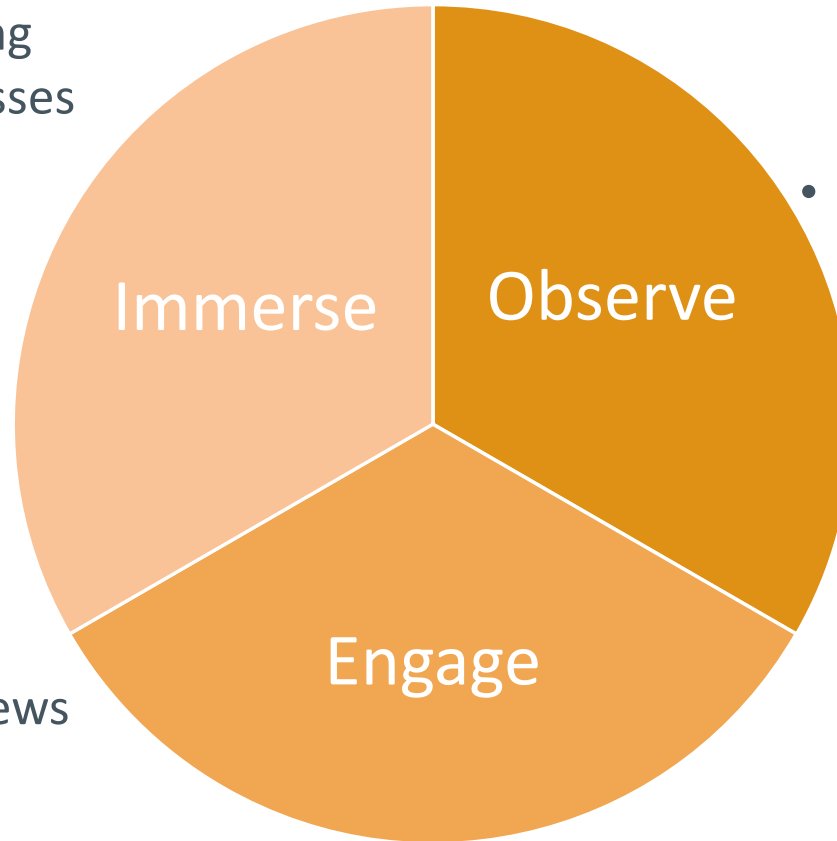
Document this impact to aid the design process

UNDERSTANDING THE STUDENT EXPERIENCE



- Shadowing
- 'Walk in their Shoes' or Mystery Shopping
- Map your Processes

- Observe students using your services or observe college practitioner's in action
- Run a simulation



- In-Depth Interviews
- Focus Groups
- Surveys
- On the Spot Micro Survey



EQUITY QUESTIONS/CONSIDERATIONS FOR EMPATHY

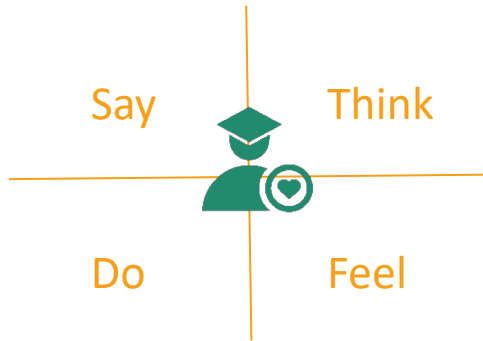


- Examine your own assumptions and biases:
 - How does my identity and experience impact how I understand my user/student's experiences?

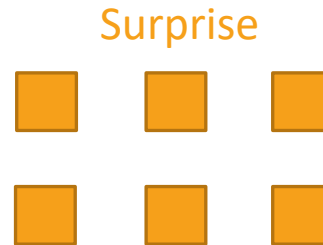
- Relinquish your expertise in other's experience: Learn and explore with empathy but also humility

- Engage users/students who have been served least historically as well as those you hear from least

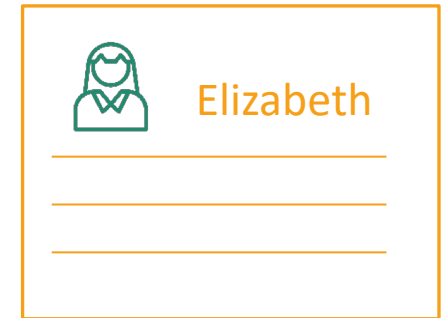
FRAMING THE CHALLENGE/OPPORTUNITY



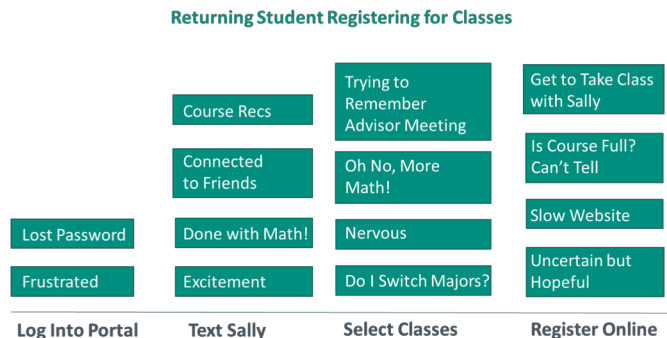
Empathy Mapping



Affinity Grouping



Student/College
Personas



Mental Models



“How might we...” Questions

“HOW MIGHT WE...” QUESTIONS--EXAMPLE

Given this insight: “Our colleges are struggling to integrate their support services.” You might create the following How-Might-We questions:

Amp up the good: HMW identify bright spots of integration and scale the best practices that enable it to work?

Explore the opposite: HMW make integration of support service the default design across our colleges?

Question an assumption: HMW understand what motivates faculty and staff to work across functional areas?

Focus in on an element: HMW make communication flows support integration as the default?

Reframe around desire: HMW illustrate how integration of services can increase job satisfaction?

Focus on emotions: HMW calm fears associated with integrating services?

EQUITY QUESTIONS/CONSIDERATIONS FOR FRAMING THE OPPORTUNITY



- What informed the current design?
- Why was it designed that way?
- Who was it designed for?
 - What differences do you see between the original design targets and your targets?
- Put your users'/students' experiences in context
 - Historical
 - Social/Societal
 - Power Dynamics
 - Resource Allocation

ACTIVITY: WHAT IS?



1. Individually, review the case study on the handout
2. As a table, create an empathy map based on the findings from the focus group



3. Finally, using the case study and empathy map, develop 2-3 “how might we...” questions to help guide the college’s solution-finding
 - Remember: HMW questions are broad enough to allow creativity, but narrow enough that specific solutions can be created for them



STEP 3: WHAT IF?

Generate ideas to solve your design challenge

- Design for the extremes
- More is better
- Suspend some aspects of reality
- Do not judge or evaluate ideas at this stage but do build on each other's ideas ("Yes, and...")
- Make the space creative to break down power structures in brainstorming
- Involve stakeholders with multiple perspectives on the challenge
- Be curious. Encourage curiosity in the team
 - Go back to the What Is? stage if more questions arise

PROBLEM-SOLVING STRATEGIES



- **Brainwrite**
- **Worst Possible Idea**
- **The Sleepover Method**
- **Question Assumptions**



How Brainwrite Works

Each participant takes a few minutes to write down their ideas about how to solve the point of view statement. Then, these ideas are rotated to another participant. The next participant expands upon the original idea. The ideas are rotated again, and so on.





CHECK AGAINST SSIPP

Sustained

Strategic

Integrated

Proactive

Personalized



Learn more about what we know about academic supports at:

<http://ccrc.tc.columbia.edu/publications/what-we-know-student-supports.html>



EQUITY QUESTIONS/CONSIDERATIONS FOR BRAINSTORMING



“We do not learn from experience...we learn from
reflecting on experience.”

John Dewey

- How does my identity impact how I understand my student's experiences and generate ideas?
- What assumptions are my ideas based on?
- Exercise humility as you generate ideas—don't be afraid to go back and explore more where needed
- Bring students into the brainstorming process





ACTIVITY: WHAT IF?

As a table, pick **ONE** of your “how might we...?” questions from earlier, then:

1. Individually, write (and/or draw) ***one good idea*** on one page and ***one really bad idea*** on the second page.
 - *Leave space for others to add to it.*
2. Pass your ideas to the person on your left
3. Expand, edit, or add to the ideas in front of you—make the good one better and the bad one worse
4. Repeat steps 3 and 4
5. Spend 5 minutes as a table discussing one idea from each person





STEP 4: WHAT WOWS?

Develop criteria for narrowing the list of ideas. Consider the following:

- Use the desirable/feasible/viable lenses as well as your design brief (step 1) to create criteria
- Never throw out the ideas most desirable for students/colleges

EQUITY QUESTIONS/CONSIDERATIONS FOR CRITERIA

- Do your criteria center equity and prioritize more resources for students/colleges with higher need?
- How do you determine which ideas are most desirable for your students, particularly those historically underserved? Are students/colleges part of your decision-making?



EXAMPLE: PRIORITIZATION GRID





STEP 5: WHAT WORKS?

1. Develop low fidelity prototypes of the selected ideas
 - Paper; Storyboards; Role play; Activity; Physical Model; Video or Graphic
2. Test these prototypes
3. Refine on your prototype based on the feedback
4. Repeat the prototype, test, refine process until a strong model emerges and a decision is made on which to implement

EQUITY QUESTIONS/CONSIDERATIONS FOR CRITERIA

- Check your assumptions and biases when interpreting feedback
- Prioritize gathering feedback from students with higher need

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Closing Thoughts

DESIGN THINKING LESSONS

- Mind the gaps
- Failure does not mean harm
- Know your role in the system of change
- Design for complexity, communicate for simplicity
- Get the innovation/implementation balance right

TIPS FOR FACILITATING YOUR OWN DESIGN THINKING WORKSHOP

- Focus on bringing out creative ideas from participants
- You will need more time than you think for each section/activity
- Be flexible
- Set ground rules
- Keep presentations to a minimum (not more than 25% of time available)
- Embrace criticism and ask “why” to uncover the root concern
- Build in time for reflection
- Get people moving



Achieving
the Dream™

THANK YOU!

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