



An Introduction to Design Thinking

Facilitator's Guide:
Script, talking points, takeaways,
and setup considerations inside.

The Wallet Project

A little background on the project

The project you're holding in your hands is an iteration on the d.school's iconic "Wallet Project." The original wallet project was created as an introduction to design thinking for the d.school's inaugural Boot Camp class in the Winter of 2006. It has since been contributed to, modified, stretched, and evolved by many d.school collaborators.

The Wallet Project is an immersive activity meant to give participants a full cycle through the design thinking process in as short a time as possible. The project itself gives facilitators the opportunity to touch on the fundamental values of the d.school—human-centered design, a bias towards action, and a culture of iteration and rapid prototyping—without attempting to communicate all of the methods and activities that the term "design thinking" encompasses.

Why did we choose a wallet as the starting point for the introductory design challenge?

- * everyone has experience with a wallet, or another way to carry cash, cards, and ID
- * the wallet and its contents have the potential to evoke a range of meaning and the larger context of a person's life
- * wallet as a starting point enables a wide range of potential innovation outcomes (we've seen objects, experiences, services, systems, and spaces!)
- * having a physical artifact in-hand allows for immediate recall of experiences (participants can gain empathy for one another in the room)

It is certainly possible to facilitate a similar project with a different topic—and you may choose to in order to amp up a particular aspect you think is important for your group of participants. For example, we have done the "oral-hygiene project" to make it more personal and had participants observe their partners in their homes previous to the beginning of the workshop. We also do a "redesign the gift-giving experience" version, with the aim to encourage participants to create services, experiences, and systems. If you decide to change the topic [you can simply change the instructions for the first two steps], be mindful of the considerations we listed above and scope it in a way that is both wide-open to possibilities but also manageable for participants.

Why project-based, team-facilitated learning?

Having created learning experiences for students of all cultures, ages, disciplines, and industries, we have found that engaging in projects provides a much richer learning experience than listening to a "talking head" does. As such, our bias is to provide limited scaffolding to allow participants to **do**, and then to facilitate a reflection that invites the participants themselves to extract the meaningful learning opportunities from the experience. We teach in teams at the d.school because we have found that this approach tends to create a conversation in the classroom, as opposed to the one-way communication that often transpires in more lecture-driven formats. We relish the diversity of perspectives that emerge when faculty from diverse backgrounds instruct, and even disagree in front of, a class. One great way to run the Wallet Project with two people, is for one to take **lead** (concentrating on communicating the instructions, logistics, and timing), and the other person to provide **color** (communicating the nuances, offering encouragement, and providing helpful tips).

How to set up and kickoff the project

Set up the room so that participants are standing (this is an ideal, not a requirement), with access to a horizontal space for note taking.

Space should be configured to allow for participants to pair up near one another easily.

Cocktail style—small, standing height—tables are nice to have.

**Play upbeat music during all steps while participants work,
and turn it down to give instruction.**

Make sure you have supplies on hand for prototyping (we recommend paper, pens, popsicle sticks, pipe cleaners, scissors, duct tape, and the like).

Print the participant worksheet in color on single-sided 11x17 paper.

Print the facilitator's guide on double-sided 11x17 paper.

Display a widely-visible timer that lets participants know how much time they have left during each step.

Find a fun way to announce "Time's up!" (we use a gong at the d.school).

Be assertive about keeping the timing tight.

Have a TEAM of coaches who are familiar with the project share the responsibility for facilitating the learning experience.

The kick-off:

**"Instead of just telling you about design thinking,
we want to immediately have you jump right in and experience it for yourself.
We are going to do a design project for about the next hour.
Ready? Let's go!"**

Design the **IDEAL** wallet.

Draw 3min

Sketch your idea here!

Design the IDEAL wallet.

How to facilitate this step

Draw

This is what we call the “false-start”.

Of course, you don't tell participants it is a false-start.

The intention is to contrast an abstract problem-centric approach (that may be typical for many people) to a human-centered design thinking approach which participants will experience in the rest of the project.

Don't play music during this step, to accentuate the difference between the false-start and the main part of the exercise.

“OK, let's jump right in.”

“This is going to feel rushed; that's okay. Roll up your sleeves and get ready to lean into the project.”

“Come up with some ideas for the ‘ideal’ wallet.”

“Go ahead and draw an idea for a better wallet.”

Let them know how much time they will have.

It is normal for people to feel stuck and delay putting anything down on paper.

Reminding them of the time they have left can push them to start.

... At the end of the step:

“How did that feel? My guess is, ‘Not great.’”

“That was a typical problem-solving approach, taking on a given problem, working using your own opinions and experience to guide you, and with a solution in mind to be designed.”

“Let's try something else—a human-centered design thinking approach.”

Design the IDEAL wallet.

Draw 3min

Sketch your idea here!

d.○○○○○

Your **NEW** mission: **Design something useful and meaningful for your partner.**
Start by gaining empathy.

1 Interview

8min (2 sessions x 4 minutes each)

Notes from your first interview

Switch roles & repeat Interview

2 Dig deeper

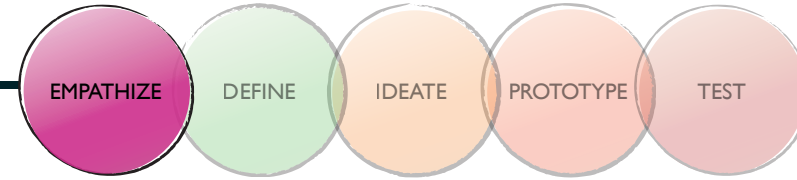
8min (2 sessions x 4 minutes each)

Notes from your second interview

Switch roles & repeat Interview

Start by gaining empathy.

How to facilitate these steps



1—Interview your Partner

Have participants partner up in pairs.

It helps to refer to “Partner A” and “Partner B” to simplify your language in these interactive steps.

“Your challenge is to design something useful and meaningful to your partner.”

“The most important part of designing for someone is to gain empathy for that person.”

“One way to do this is to have a good conversation.”

Be clear about the logistics of the interviews:

“Partner A will have four minutes to interview Partner B, and then we will tell you when to switch.”

“As a starting point, ask your partner to walk you through the contents of their wallet.”

“When do they carry their wallet? Why do they have a particular card in there? What do the things in their wallet tell you about their life?”

Tell them to take note of things they find interesting or surprising.

“Let’s begin!” (Don’t forget to start playing the upbeat music now.)

2—Dig deeper

After the first set of interviews, tell them to follow up on things that intrigued them during the first interview.

“Try to dig for stories, feelings, and emotion.”

“Ask ‘WHY?’ often”

“Forget about the wallet, find out what’s important to your partner.”

You might pause and give them a short time (forty-five seconds) to plan their second interview.

Remind them you will let them know when time is up.

...“Time to switch! Again, make note of any unexpected discoveries along the way, capture quotes!”

Your **NEW** mission: **Design something useful and meaningful for your partner.**
Start by gaining empathy.

1 Interview

8min (2 sessions x 4 minutes each)

Notes from your first interview

d. ●●●●●

Switch roles & repeat Interview

2 Dig deeper

8min (2 sessions x 4 minutes each)

Notes from your second interview

Switch roles & repeat Interview

Reframe the problem.

3 Capture findings 3min

needs: things they are trying to do*

*use verbs

insights: new learnings about your partner's feelings/
worldview to leverage in your design*

*make inferences from what you heard

4 Define problem statement 3min



_____ **name**

needs a way to _____

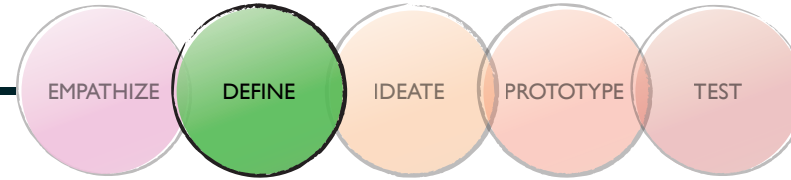
user's need

Unexpectedly, in his/her world,

_____ **insight**

Reframe the problem.

How to facilitate these steps



3—Capture findings

Tell them to *individually* take a few minutes to collect their thoughts and reflect on what they've learned about their partner.

“Try to synthesize your learning into a few ‘needs’ that you have discovered, and a few ‘insights’ that you find interesting.”

“Needs” should be verbs.”

“For example maybe your partner *needs* to minimize the number of things he carries . . . or needs to feel like she is supporting the local community and economy.”

“Insights’ are discoveries that you might be able to leverage when creating solutions.”

“For example, you might have discovered the insight that buying with cash makes your partner value the purchase more and take more care with decisions.”

4—Define the problem statement

Now tell them to select the most compelling need and most interesting insight to articulate a problem statement.

“This is the statement that you’re going to address with your design, so make sure it’s juicy and actionable!”

“It should feel like a problem worth tackling!”

“Bonus points if you can describe your partner with adjectives and nouns more descriptive than their name alone.”

Reframe the problem.

3 Capture findings 3min

needs: things they are trying to do*

*use verbs

insights: new learnings about your partner's feelings/
worldview to leverage in your design*

*make inferences from what you heard

d. ©©©©©

4 Define problem statement 3min



name

needs a way to


user's need

Unexpectedly, in his/her world,

insight

Ideate: generate alternatives to test.

5 Sketch 3-5 radical ways to meet your user's needs. 5min



write your problem statement above

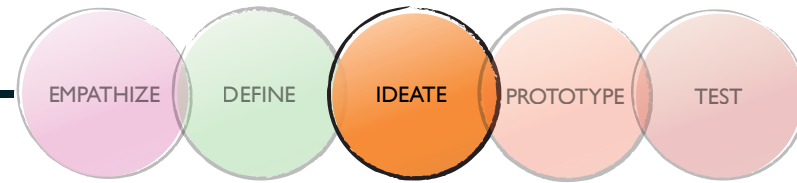
--	--	--	--	--

6 Share your solutions & capture feedback. 10min (2 sessions x 5 minutes each)

Notes

Ideate: generate alternatives to test.

How to facilitate these steps



5—Sketch to Ideate

Have them rewrite their problem statement at the top of the page.

Remind them they are now creating solutions to the new challenge they've identified.

They them to sketch a lot of ideas, and to try to create a number of different ideas.

“GO FOR VOLUME!”

“This is time for idea generation, not evaluation—you can evaluate your ideas later.”

You can even suggest a friendly competition to come up with the most ideas --

“See if you can come up with at least 7 ideas!”

Remind them they are not necessarily designing a wallet; instead they should create solutions to problem statement they just created.

“Remember to be VISUAL—use words just when necessary to call out details.”

... “One minute left! Try to sketch at least 2 more wildly different ways to address your problem statement!”

6—Share solutions and capture feedback

“Now it's time to share your sketches with your partner!”

“Partner A, share your sketches with Partner B first, and then we will tell you to switch after four minutes.”

Tell them to note likes/dislikes and builds on the idea, but also listen for new insights.

“This is not just about testing your ideas.”

“This is another opportunity to learn more about your partner's feelings and worldview.”


“Fight the urge to explain and defend your ideas—see what they make of them!”

“Spend the time listening to your partners reactions and questions.”

Tell them to switch after time is up for the first session.

Ideate: generate alternatives to test.

5 Sketch 3-5 radical ways to meet your user's needs. 5min

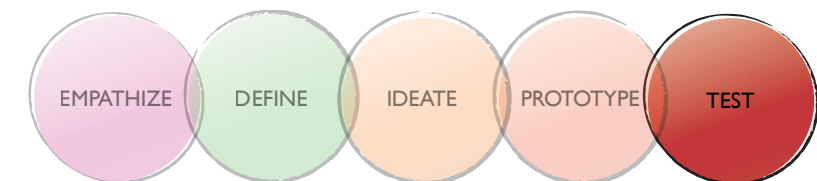
 write your problem statement above

6 Share your solutions & capture feedback. 10min (2 sessions x 5 minutes each)

Notes

d. ●●●●●

Switch roles & repeat sharing.



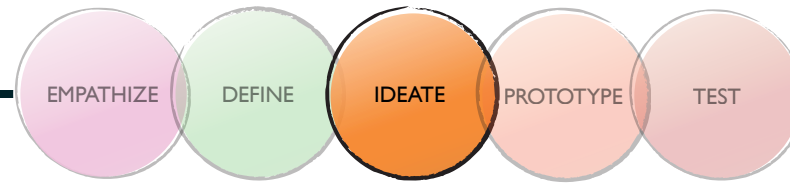
Iterate based on feedback.

7 Reflect & generate a new solution. 3min

Sketch your big idea, note details if necessary!

Iterate based on feedback.

How to facilitate this step



7—Reflect & generate a new solution

They've had a chance to share their sketches with their partners and collect feedback.

“Now, take a moment to consider what you have learned both about your partner, **and** about the solutions you generated.”

“From this new understanding of your partner and his or her needs, sketch a new idea.”

Tell them this solution may be a variation on an idea from before or something completely new.

They are still addressing a problem statement that *they* articulated, but you might point out that their previous problem statement may need to change to incorporate the new insights and needs they discovered.

“Try to provide as much detail and color around your idea as possible.”

“How might this solution fit into the context of your partner's life?”

“When and how might they handle or encounter your solution?”

While participants are working, grab the prototyping materials if you have not already.

Iterate based on feedback.

7 Reflect & generate a new solution. 3min

Sketch your big idea, note details if necessary!

d.00000

Build and test.

8 Build your solution.

Make something your partner can interact with!

[not here]

7min

9 Share your solution and get feedback.

+ What worked...

- What could be improved...

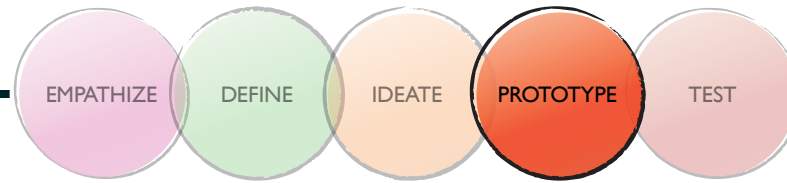
? Questions...

! Ideas...

8min (2 sessions x 4 minutes each)

Build and test.

How to facilitate these steps



8—Build!

Tell participants to use the idea they just sketched as a blueprint for a tangible manifestation of their solution.

“Create a physical prototype of your solution.”

Explain that they should not simply make a scale model of their idea to explain the idea.

They should create an experience that their partner can react to.

They could decide to test just one aspect of the overall solution.

“MAKE something that your partner can engage and interact with.”

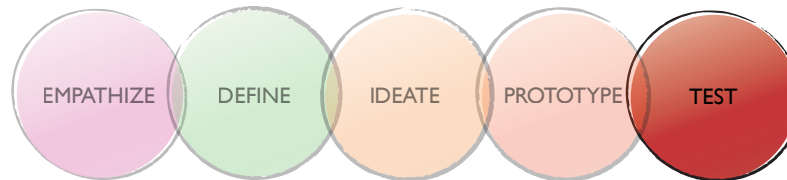
“If your solution is a service or a system,

create a scenario that allows your partner to experience this innovation.”

“Use whatever materials are available to you—including space!”

Provide some urgency and excitement in your voice—you want to get them building immediately.

“Be scrappy and quick—you only have a few minutes!!”



9—Share your solution and get feedback

Explain that one partner will have time to share and collect feedback, and then they will switch so the other partner can share.

“Now you’re going to have the opportunity to share your prototype with your partner.”

Validation of the prototype is not the point—it should be an artifact that facilitates a new, targeted conversation.

“When you test, LET GO of your prototype, physically and emotionally.”

“Your prototype is NOT PRECIOUS, but the feedback and new insights it draws out are!”

“Don’t defend your prototype; instead, watch how your partner uses and misuses it.”

Tell them to jot down things their partner liked and didn’t like about the idea, as well as questions that emerged and new ideas that came up.

Build and test.

8 Build your solution.

Make something your partner can interact with!

[not here]

6min

d. ●●●●●

9 Share your solution and get feedback.

+ What worked...

- What could be improved...

? Questions...

! Ideas...

8min (2 sessions x 4 minutes each)

Reflection and takeaways.

How to facilitate this step

10—Group gather and debrief

This step is important! A well facilitated reflection has the power to turn this exercise from simply a fun activity to a meaningful experience that could impact the way participants approach innovation in the future. Quickly pull together a few tables that everyone can gather around.

Tell everybody grab their prototypes and set them on the table in the middle of the room.

“We’re going to huddle around and see what innovations you’ve created for your partners!”

“Who had a partner who created something that you really like?”

“Who sees something they are curious to learn more about?”

Ask for the person who created the prototype and engage them in the conversation.

“How did talking to your partner inform your design?”

“How did testing and getting feedback impact your final design?”

“What was the most challenging part of the process for you?”

The key to leading this conversation is to relate the activity to the big takeaways you want to illustrate.

Some of core values of design thinking that would be great to draw out include:

Human-centered design: Empathy for the person or people you are designing for, and feedback from users, is fundamental to good design.

Experimentation and prototyping: Prototyping is not simply a way to validate your idea; it is an integral part of your innovation process. We build to think and learn.

A bias towards action: Design thinking is a misnomer; it is more about doing that thinking. Bias toward doing and making over thinking and meeting.

Show don’t tell: Creating experiences, using illustrative visuals, and telling good stories communicate your vision in an impactful and meaningful way.

Power of iteration: The reason we go through this exercise at a frantic pace is that we want people to experience a full design cycle. A person’s fluency with design thinking is a function of cycles, so we challenge participants to go through as many cycles as possible—interview twice, sketch twice, and test with your partner twice. Additionally, iterating solutions many times within a project is key to successful outcomes.

