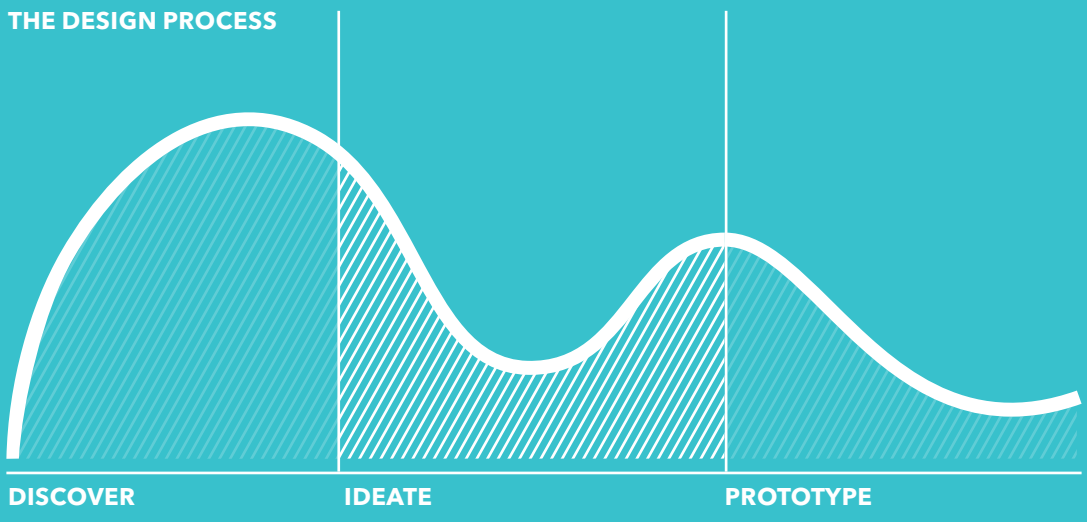
3

IDEATE



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WORKSHOP PREPARATION

READINGS

WORKSHOP PREPARATION

For Class 3 Ideate Workshop

CHOOSE A CLASS LEADER

GATHER SUPPLIES FOR CLASS 3 WORKSHOP
Here's what you'll need: your notebook from Class 2 (or wherever you wrote down your notes), pens, felt markers or Sharpies, Post-Its (or their equivalent).

READ REQUIRED CLASS 3 READINGS

FIND A MEETING LOCATION
Choose a location with plenty of wall or table space, so that you can hang up and display your Post-its during the Class 3 Workshop.

NOTE THAT THE CLASS 3 WORKSHOP IS LIKELY TO TAKE TWO AND A HALF HOURS TO COMPLETE
Confirm with your team that they have this much time available to meet.

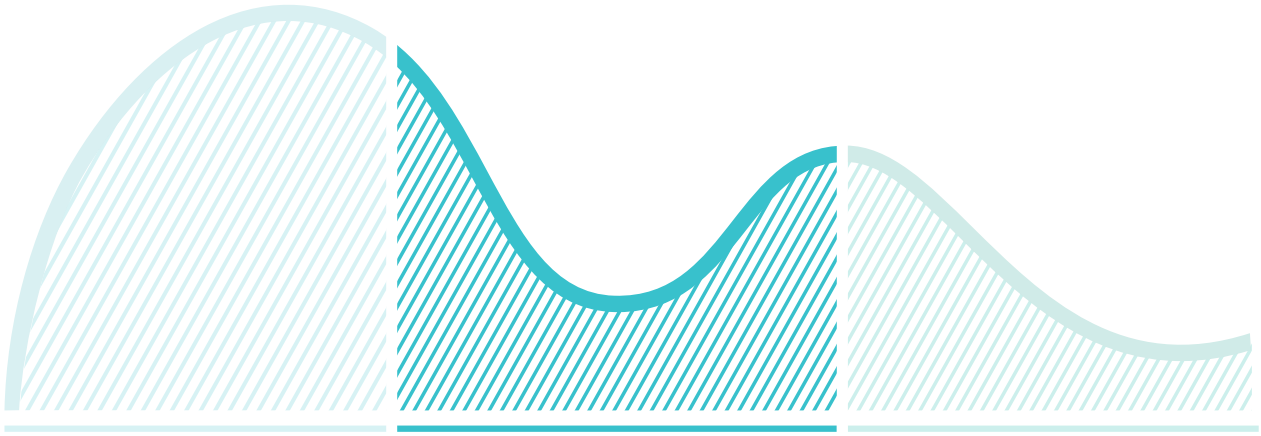
WRITE DOWN THREE TAKEAWAYS TO DISCUSS WITH YOUR TEAM
It can be a quick summary of your Class 3 Ideate readings or the Online Community page, connections you made regarding your prior knowledge, or inspiration from another team.

BRING PRINTED CLASS 3 WORKSHOP GUIDE

READINGS

01 Human-Centered Design Phase 2: Ideate

THE DESIGN PROCESS



IDEATE

The Ideate phase transforms your research into meaningful and actionable insights that will become the foundation of your design.

You'll begin by making sense of what you learned from your interviews and observations. These themes and insights will help you define opportunities for design that are differentiated and generative. You'll then expand your thinking by brainstorming, generating lots of new possibilities for what you might make, and setting the direction for your future design solution.

CLASS 3

IDEATE

STEP 1

TELL STORIES

During your research you talked to many people and were inspired by immersing yourself with people in context. Now that you're back with your design team and starting the Ideate stage, it's time to share stories about what you learned.

THIS GETS YOU
A deeper contextual understanding that's shared by your entire team.

KEEP IN MIND
Tell stories person by person, one at a time. Use vivid details, direct quotes whenever you can, and describe your immediate experiences. This is not the time to generalize or judge.

Share Inspiring Stories

You'll share what you learned from your research as stories, not just general statements. This will create common knowledge that your team can use to imagine opportunities and ideas.

Set up a space
Make sure you hold the Class 3 Workshop in a room with plenty of wall space. Distribute Post-it notes (or their equivalent) and markers. It will be helpful to have large sheets of paper nearby, as well as tape to attach these sheets to the wall.

Take turns
Your design team will describe the individuals you met and the places you visited. Be specific and talk about what actually happened. Revisit the notes you took during your interview or observation. If possible, consider printing out some of the photos you took and using them to illustrate your stories.

What to share
You will tell the story of each person you met following these prompts (you may have already used them when capturing your first impressions):

» Personal details: who did you meet? (profession, age, location, etc)

» Interesting stories: what was the most memorable and surprising story they told you?

» Motivations: what did this participant care about the most? What motivates him/her?

» Barriers: what frustrated him/her?

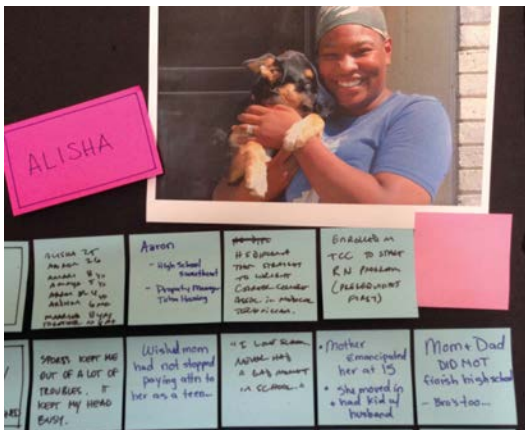
» Interactions: what was interesting about the way he/she interacted with his/her environment?

» Remaining Questions: what questions would you like to explore if you had another conversation with this person?

Actively listen
While you are listening to each other, compare and contrast the things you have learned. Explore areas where you find different opinions and contradictions. Begin to look for recurring themes.

Capture the information in small pieces
While you are listening to your design teammates tell their stories, write down notes and observations on Post-its or their equivalent. Use concise and complete sentences that everyone on your team can easily understand. Capture quotes—they are a powerful way of representing the voice of a participant.

Display your notes
You will want to write large enough so that everyone can read your notes. Your team will put all Post-its up on the wall, organizing them into separate categories for each person that your team interviewed and each place that your team visited.



STEP 2

FIND THEMES

You have your Post-its on the wall. You've downloaded what you learned during your Discover research. Now it's time to work with your design team to identify the patterns and themes in what you learned from the community.

THIS GETS YOU
Topics to help you narrow and focus your design solution.

KEEP IN MIND
Clustering can become difficult when there are many people involved. Consider splitting into smaller groups, or have a few people work on the themes first and then present back and discuss.

Search for Meaning

After collecting and sharing stories from your fieldwork, your design team will begin to make sense of all that information and inspiration. This part of the process can take some time. A good first step is to identify themes.

Cluster related information
Your team will group field research findings into categories or buckets. You can start by having every team member choose three Post-its they find most interesting. Place each of them on a large sheet of paper or spread them on the table in front of the team. Begin to look for more evidence of the same theme. What did many people mention? Did someone else say the opposite? Are there behaviors you saw repeatedly? Which issues were obvious? Rearrange the Post-its into these new theme buckets.

Find headlines
Name the clusters you have defined, e.g., "access to capital" or "problems with distribution." Continue to sort and rearrange the information until you feel you have picked the interesting bits out and there are no major themes that are missing.

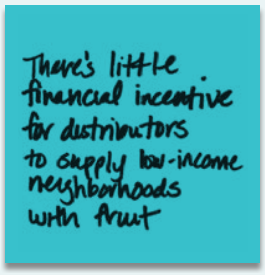
When sharing stories, make sure that everyone contributes their perspective.

The Evolution of Your Notes

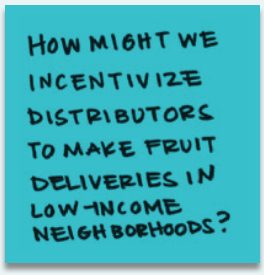
Throughout the Ideate phase, your perspective will evolve and change. As you gain a clearer understanding of what your observations mean, you can relate them to your challenge and use them as inspiration. This part of the process requires a lot of patience. Use the examples below to navigate the development of your notes from early thoughts to ideas.

Learnings
Learnings are the recollections of what stood out during a conversation or observation: direct quotes, anecdotes, notes on sounds, smells, textures, colors, etc. Learnings should be communicated in full sentences to capture the story. You'll capture learnings as your team recounts what they observed during research.

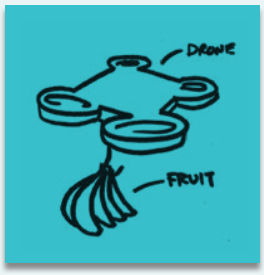
Themes
Themes are created after you have organized the stories from your field research into categories. Did you hear similar statements or observations from multiple people? Themes are the headlines for clusters of similar learnings.



Insights
Insights are a succinct expression of what you have learned from your field research activities. Insights offer a new perspective, even if they are not new discoveries. They are inspiring and relevant to your challenge.



How Might We's
"How Might We" questions are the starting point for a brainstorming session. How Might We questions are written in direct response to an insight. These questions feel optimistic and exciting and should help you think of new ideas quickly.



Ideas
Ideas are generated during a brainstorming session. Ideas can be practical and simple or wild and crazy (like the hypothetical delivery drone in the example above, which could make low-cost fruit deliveries in small quantities to multiple locations in a neighborhood). All judgment is deferred during a brainstorm, as the goal is to come up with as many ideas as possible. Ideas are best communicated with quick sketches.

THIS GETS YOU
A generative yet narrowed place from where to brainstorm.

KEEP IN MIND
Not every insight is entirely new information. Often, you will find things that you knew about before, but your research may have given you a new perspective. Don't be shy about retelling these stories.

Turn Your Themes Into Insight Statements

Insights are a concise expression of what you learned from your research and inspiration activities. They are the unexpected information that make you sit up and pay attention. Insights allow you to see the world in a new way and are catalysts for new ideas.

Turn headlines into statements
Your team will take a closer look at the themes you created for each of your clusters, as well as the stories that support these themes. Next, you'll transform each theme into a sentence, eg: "There is no financial incentive for distributors to deliver fruit in the community." Write in full sentences. Use a new Post-it and label your cluster with this new sentence.

Reconnect the learnings to your challenge
Revisit the design challenge that you started out with: how do your new insight sentences relate to your challenge? Narrow down your insights to those that are most relevant to the original design challenge. Be prepared to let go of details that are less important. Try to limit your insights to the three to five most important ones.

Refine your insights
Experiment with the wording and structure to best communicate your insights. Create short and memorable sentences that get to the point. Make sure your insights convey the sense of a new perspective or possibility.

Get an outside perspective
Consider inviting someone who is not part of your team to read your insights and check whether they resonate with an outside audience.

SAVING MONEY IN MEXICO

IDEO.org partnered with the Consultative Group to Assist the Poor (CGAP) to design new and more accessible savings products for low-income Mexicans.

When the IDEO.org team began conducting research in Mexico City, they learned that people were in fact saving in all sorts of incredibly diverse ways. However, these savings methods were outside of the formal banking system and often not talked about by people in the community in a language related to savings. Based upon this insight, the team began designing a series of savings products building off of, instead of replacing, the informal savings behaviors in which low-income Mexicans were already engaged.

Good Insights Are...

Crafting great insights is one of the trickiest parts of the human-centered design process, and something that takes a lot of practice. Here are some criteria that will help you know when you've got a good insight.

Intuitive. They make sense based on gut instinct. They feel surprising yet true.

Not obvious. They illuminate something under the surface. They pass the "So what?" test.

Generative. They suggest opportunities for new ideas and concepts.

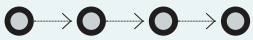
Sticky. Good insights are pithy and get repeated.

Other tools for uncovering meaning

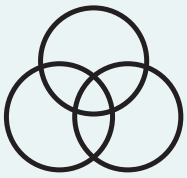
The Ideate stage is the most challenging phase of the human-centered design process. Often, the Ideate phase can take weeks and weeks for an IDEO.org design team. As part of this course, we have streamlined the Ideate phase into a series of activities that your team can conduct over the course of a few hours during your workshop. These activities will help to transform your research into meaningful insights that you can use to begin brainstorming new ideas.

We recognize that there are many frameworks and tools you may already be familiar with for ideation (which is also known as synthesis). If you feel comfortable doing so, we encourage you to employ other methods to help navigate your team through the Ideate phase. However, please ensure that there is consensus on your team and that you've built in sufficient time for trying out these additional synthesis methods during the Class 3 Workshop.

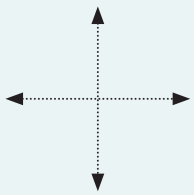
Below are a few examples of additional Ideate tools and frameworks your team might consider using that will help make information more visual as you uncover themes and identify insights.



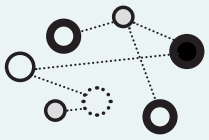
Journey Map
Journeys are great for looking at an experience or process over time. You can map people's moods, experiences, behaviors, or needs.



Venn Diagram
Venn diagrams help you express a few important themes and the relationships between them.



Two-by-Two
This mapping tool helps emphasize tensions and create different categories of behavior that you observed during your Discover research.



Relationship Map
By visualizing the relationships between different stakeholders or throughout systems your team encountered, a relationship map helps to explain connections and tensions.

STEP 3

CREATE "HOW MIGHT WE" QUESTIONS

Insights are most valuable when they can be used to generate inspiring new ideas. The trick is to transform insights into generative questions which will become the springboard that your design team uses to brainstorm innovative new solutions.

THIS GETS YOU
Generative and actionable brainstorming questions that respond to the insights you found.

KEEP IN MIND
Avoid brainstorm questions that already imply a solution. Ask yourself: "Why do we want to do that?" This will help you reframe your question more broadly.

Make Insights Actionable

Developing "How Might We" (HMW) questions can take some practice. This step is important, however, because HMW questions are the link between the great research you already conducted and the brilliant new ideas that you'll begin brainstorming next.

Develop HMW questions
During this step, you'll create generative questions that build off of the insight sentences that your team just created. Start each statement with "How Might We...?" as an invitation for input, suggestions, and exploration. Generate multiple questions for every insight sentence. Write them in plain, simple, and concise language.

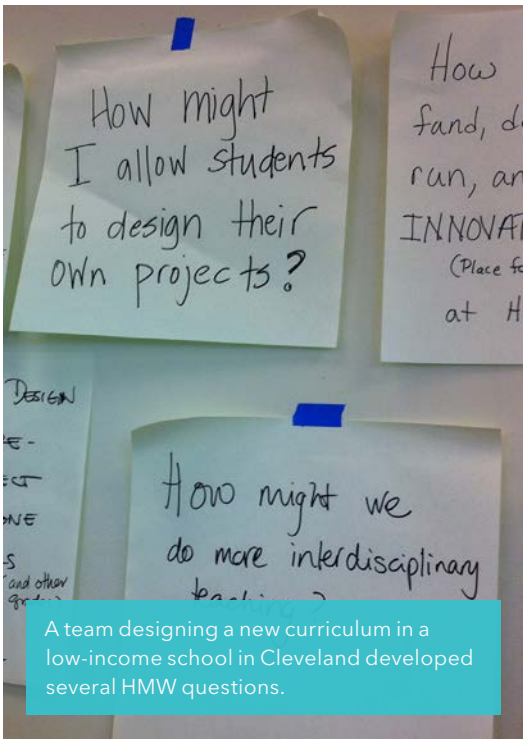
For example:

How might we provide transportation options for distributors supplying fruit in low-income neighborhoods? This implies that the solution is related to logistics. By framing the HMW question in this narrow way, we have limited the possible directions that the team can take during brainstorming. This statement is too narrow.

How might we sell more fruit in low-income neighborhoods? This question doesn't give enough direction because it doesn't imply a starting point or immediately help people generate ideas around one category (such as distributors). This How Might We statement is too broad.

How might we incentivize distributors to make fruit deliveries in low-income neighborhoods? This How Might We question is better because it leaves open many possible directions that new solutions can take, including logistics, financial incentives, or even community pride. This HMW question is scoped properly.

Choose brainstorm questions
Your design team will select three of your best HMW questions for your brainstorm session. Trust your gut feeling: choose those questions that feel exciting and help you think of ideas right away. Also, select the questions that are most important to address, even if they feel difficult to solve for.



A team designing a new curriculum in a low-income school in Cleveland developed several HMW questions.

STEP 4

GENERATE IDEAS

Brainstorming may often be thought of as wild and unstructured, but it is actually a focused activity that involves a lot of discipline. Follow the brainstorming rules, but also have lots of fun. This is the stage of the human-centered design process where you really get to tap into your creativity.

Prepare for Brainstorming

THIS GETS YOU
The right kind of space for a dynamic brainstorming session.

KEEP IN MIND
When you make brainstorming part of another activity, lesson, or meeting, remember that generating ideas is a mode that participants need a little time to get into. Create the time and space for a transition into that mindset.

Take the time to set up appropriately in order to get the most out of your session. When planning for your Class 3 Workshop, consider the following guidelines which will make for an awesomely powerful brainstorming session.

Choose an appropriate space
Make sure to conduct your Class 3 Workshop in a room with sufficient wall space, where participants can comfortably get up from their chairs and move around.

Provide tools to capture ideas
Gather materials like Post-it notes (or square pieces of paper and tape), markers, paper, and snacks: don't underestimate the power of sugar in a brainstorming session!

Invite a diverse group of people
Consider involving people who are not part of your team to the Class 3 brainstorming session, as they'll have a fresh perspective. Try to include six to eight people.

Plan for 45 minutes or so
It's best to keep brainstorming sessions less than an hour, so plan on two to three brainstorm questions, and spend no more than 15-20 minutes on each. This is the best approach for maintaining focus and energy.

Brainstorming Rules

These seven rules will make your brainstorming session focused, effective, and fun. Introduce them at the start of every brainstorm, even if they merely serve as a reminder for more experienced participants.

Defer judgement. There are no bad ideas in a brainstorm. There will be plenty of time to narrow the ideas later.

Encourage wild ideas. Even if an idea doesn't seem realistic, it may spark a great idea for someone else.

Build on the ideas of others. When you hear an idea from a teammate, think "and..." rather than "but..." in order to be as generative and open as possible.

Stay focused on topic. To get more out of your session, keep your brainstorm "How Might We" question in sight.

One conversation at a time. All ideas should be heard, so only one person should talk at a time. Wait your turn to share and make sure the whole group is listening.

Be visual. Draw your ideas, as opposed to just writing them down. Stick figures and simple sketches can say more than many words.

Go for quantity. Set an outrageous goal—then surpass it. The best way to find one good idea is to come up with lots of ideas.

THIS GETS YOU
A lot of fresh, new ideas.

KEEP IN MIND
Brainstorming is a fast and dynamic activity. Have your team stand up and encourage people to speak up and keep it short: only take a few seconds to explain an idea.

Facilitate Brainstorming

Brainstorming is a great activity to generate fresh thoughts and new energy. Create a safe and positive atmosphere for your brainstorm so the team can come up with all kinds of wild ideas.

Select a facilitator
The Class Leader should lead the brainstorm. Familiarize yourself with brainstorming protocol.

Introduce the rules of brainstorming
Explain each rule and its purpose to set the right tone for the activity. You can find an overview of brainstorming rules at the beginning of this section.

Equip everyone for participation
Gather your team near a wall or flipchart. Give everyone a Post-it pad and a marker. Encourage people to draw and be visual. Remind them to write in large letters and to note only one idea per Post-it.

Move one by one
Post the question you are brainstorming about on the wall so everyone can see it. Ask participants to take a few minutes and write down their first ideas before starting as a group. Then facilitate the brainstorm and capture each individual idea.

Keep the energy high
Provide encouragement or alternative topics if the flow of ideas slows down. Switch to a new brainstorm question every 15-20 minutes. Throw out some wild ideas yourself. Remind your team of the rules if needed. Set a goal for how many ideas you want to generate in total.

This team invited people outside the project to help them get unstuck and expand their design possibilities.

THIS GETS YOU
A selection of ideas that the whole team is excited about taking forward.

KEEP IN MIND
Trust your gut feeling as long as there is excitement about an idea, it will be a good basis to work from.

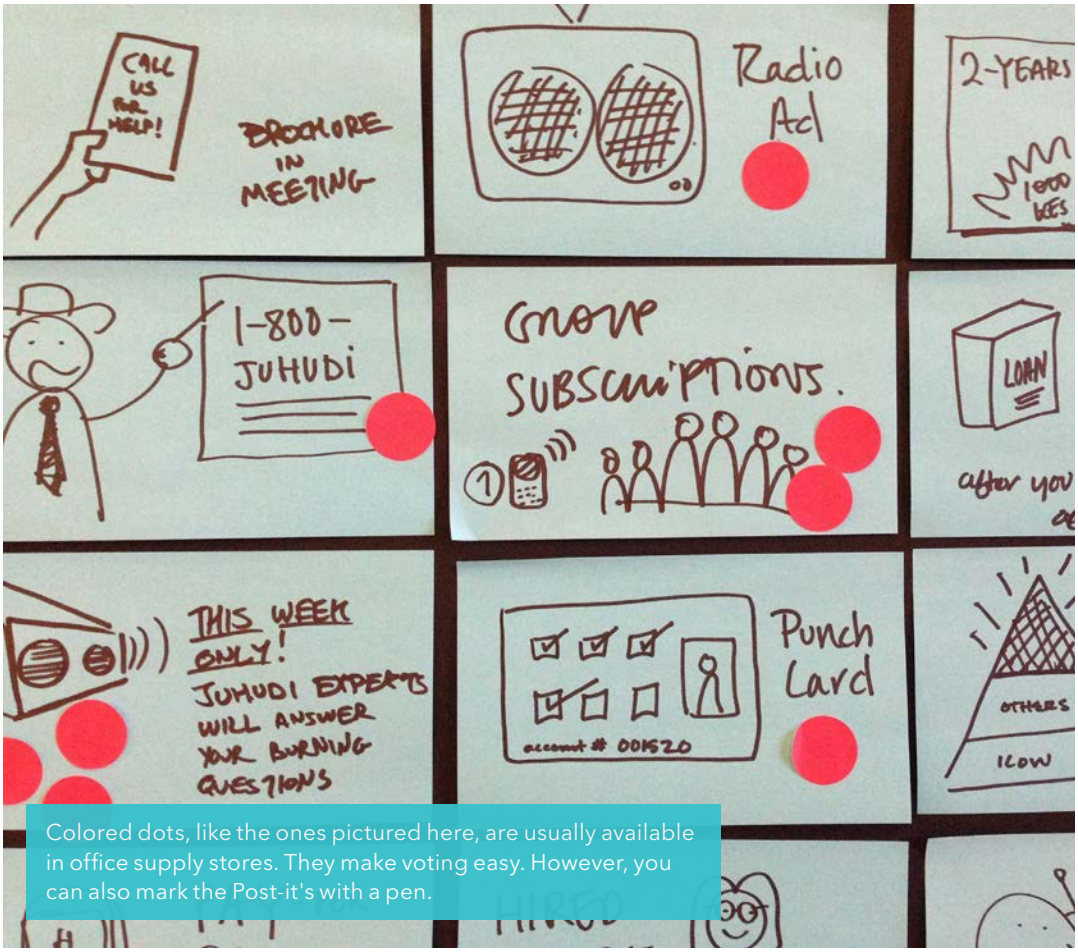
Select Promising Ideas

The passion and energy of your team around particular ideas will make the development of your designs successful going forward. To get a sense of which brainstorming ideas generate the most excitement, everyone on the team will vote on their favorites while they are still fresh in your minds.

Cluster your ideas
Spend a few minutes immediately after a brainstorming session grouping together similar ideas.

Vote for favorite ideas
Your team will then select their favorite ideas. Everyone will make two selections — the idea that you think is most likely to succeed and the idea that you find to be most innovative. Let people decide in silence first, so that they are not swayed by others' opinions. Vote directly on the brainstorm Post-it's, either using sticky dots or simply drawing a dot.

Discuss the results
Count the votes and determine the most popular ideas. As a team, evaluate the most promising ideas and decide which ones to develop further. Be realistic about the number you can pursue—aim for two or three ideas to start with.



Colored dots, like the ones pictured here, are usually available in office supply stores. They make voting easy. However, you can also mark the Post-it's with a pen.

READINGS

02 Case Study: d.light

D.LIGHT
UNCOVERING MEANING USING THE HUMAN-CENTERED DESIGN PROCESS

One out of three people on the planet don't have access to reliable electricity. d.light—a for-profit social enterprise and Acumen investee—designs, manufactures, and distributes solar light and power products throughout the developing world. d.light's mission is to create new freedoms for people without access to reliable power, so they can enjoy a brighter future. To that end, d.light employs human-centered design in every stage of its process.

Arlin Tao, Director of Product Marketing at d.light, describes how the company practices human-centered design.

"We have a principle: before any field research begins, we need to know what we are looking for. It's very important that before we go out, we have clarity on what we are trying to learn. We also come up with a hypothesis about what we are trying to prove or disprove. Knowing what we want to learn helps us think strategically with our interview questions. We don't just ask during an interview, 'How much do you want to pay and what color do you like?' The answers we hear to these questions won't be meaningful, either because the people we're speaking with don't know exactly how to acticulate what they want or because they will be telling us what they think we want to hear. Instead, we ask them questions that are unrelated to solar lights. Or we observe them in action.

"After we have probed an area of interest in different ways, we observe commonalities between the different people we talked to. We look for patterns, and when these patterns emerge we say, 'Oh, this is interesting!'

We look for tensions between a want or a need, and the reality that the people we are speaking with are living on a day-to-day basis.

Some examples of tension, as they relate to solar lanterns, that we hear: 'I'm uncomfortable with kerosene because it's dangerous.' Or, 'I'm burning money every day because there is no other choice.' If there is not a tension, there is not really a need, because a customer is likely to live with the problem. If it's not important enough that our product would bring value into your life, than you likely won't pay for it. The lighting option is not the tension, the underlying cost of kerosene lamps is the tension.

After a day in the field, during the car ride back to the city or at the hotel, we try to jot down and talk as a group about what we observed, what was interesting, what surprised us. Before we forget, before we get overwhelmed, we write down our notes. If Post-it notes are available, we use them. Sometimes we use flip chart paper, napkins, computers—whatever we can find. The key is to get everyone's perspectives and jot them down .

At the end of the trip, we sit down and do a full field debrief. We summarize the commonalities and patterns. We try to identify the insights behind what we observed."

Arlin offers these three pieces of advice for people starting out the human-centered design process:

Before you go out and conduct research, be clear on what you want to learn and what you want to do with the data. If there is no way that you can ever make it happen, what is the point of finding out if people want something? Stay focused on what you want to learn, but if you see something new and interesting, do not be afraid to take a detour. Having a clear plan allows you to take detours and deviate without getting lost.

Immerse yourself as frequently as possible with the end user. Experience their actual, physical reality. You can't empathize 100%, but you can try to get as close as possible. Immersions help you understand the lens by which others see the world.

Assemble multiple and diverse teams for field visits. Everyone will have their own unique perspective and background, and because of this, they will pick up on different details during an interview. An engineer notices different details than a writer or designer or a marketer might. Diverse perspectives are very helpful in providing breadth and depth during the Interpret phase of the design process.

READINGS

03 Optional Articles & Videos

Read

HCD Connect "Create" Methods

The "Create" methods on HCD Connect correlate to the "Ideate" methods that you're learning about as part of the Class 3 Workshop. http://www.hcdconnect.org/methods

The Ideate Phase in Action

Melissa Rohde is working with a community in rural India to design new ways to decrease water scarcity and improve food security. Learn more about her journey through the Ideate stage: http://bit.ly/HCDinIndia

Carla Lopez reflects on some of the challenges her team faced during the Ideate stage of an IDEO.org project designing new ways to provide technical training for farmers in rural Kenya: http://bit.ly/JKandIDEOorg

Watch

Chimamanda Adichie's TED Talk: The Danger of a Single Story

http://www.ted.com/talks/chimamanda_adichie_the_danger_of_a_single_story.html.
You can also read the TED Talk transcript here: http://bit.ly/112fZPB

IDEO on How You Come Up With New Ideas

http://www.edutopia.org/design-thinking-for-educators-ideation-week-three

Download

HCD Toolkit p. 79–111

The "Create" stage in the HCD Toolkit correlates to the "Ideate" phase that you just read about and that you'll be doing yourself as part of the Class 3 Workshop.
http://www.hcdconnect.org/toolkit/en/download