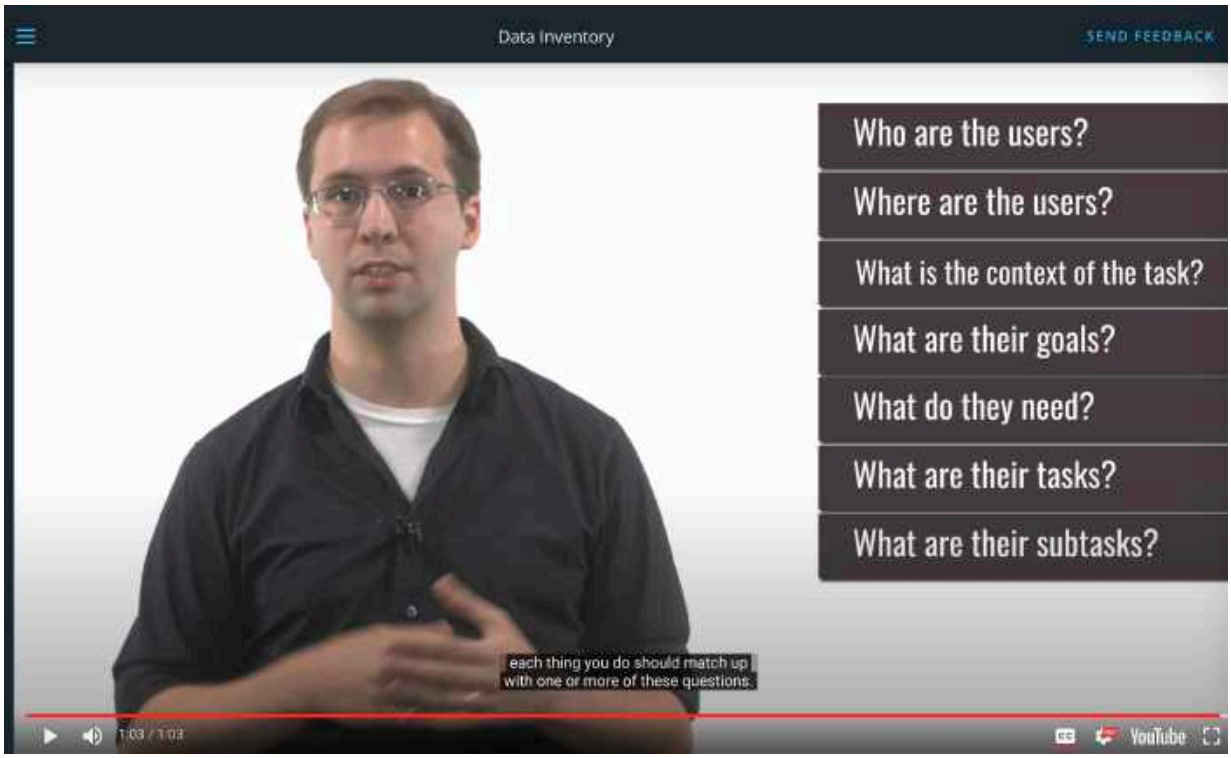
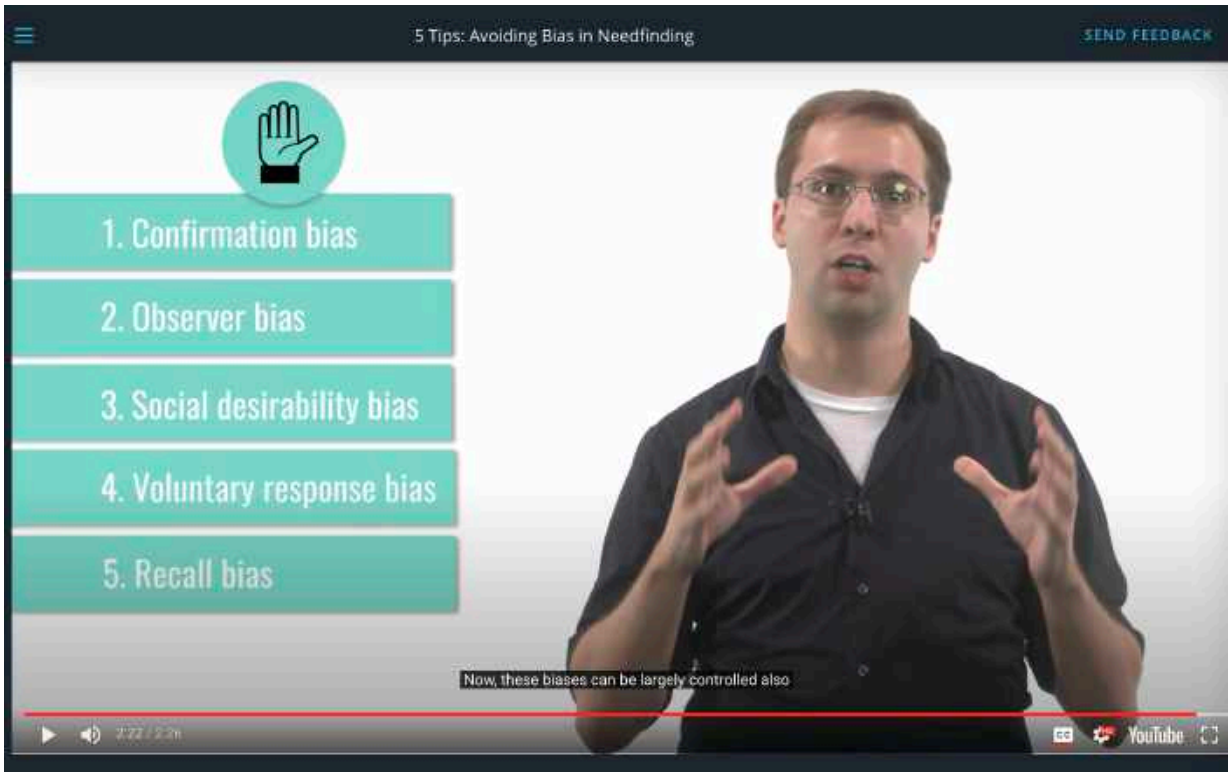
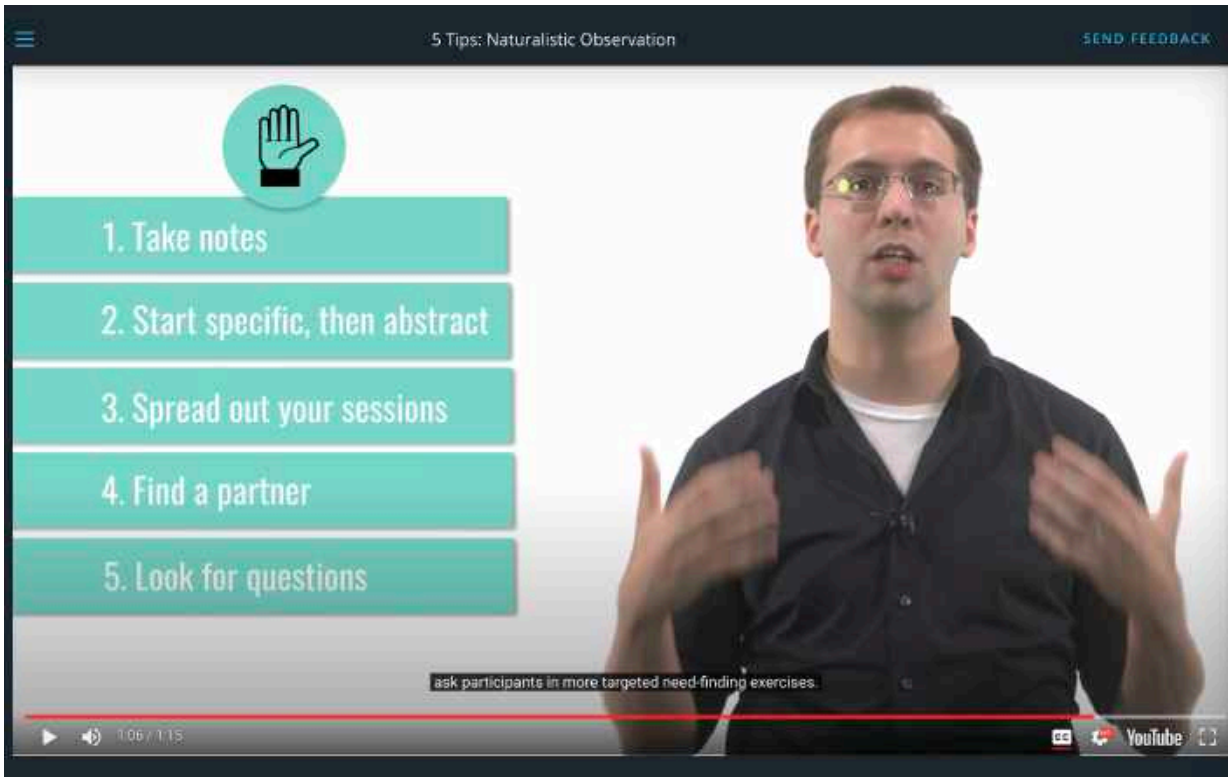
HCI

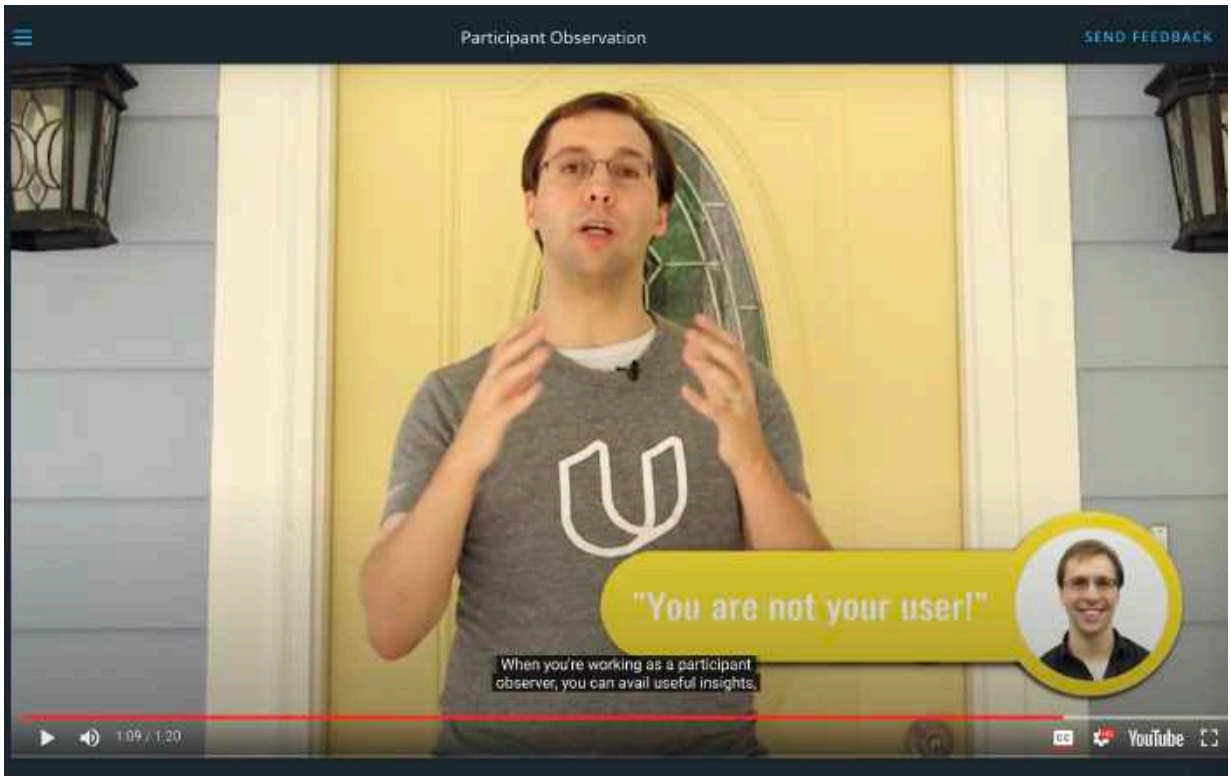

Data Inventory
SEND FEEDBACK
Who are the users?
Where are the users?
What is the context of the task?
What are their goals?
What do they need?
What are their tasks?
What are their subtasks?
each thing you do should match up
with one or more of these questions.
1:03 / 1:03
YouTube

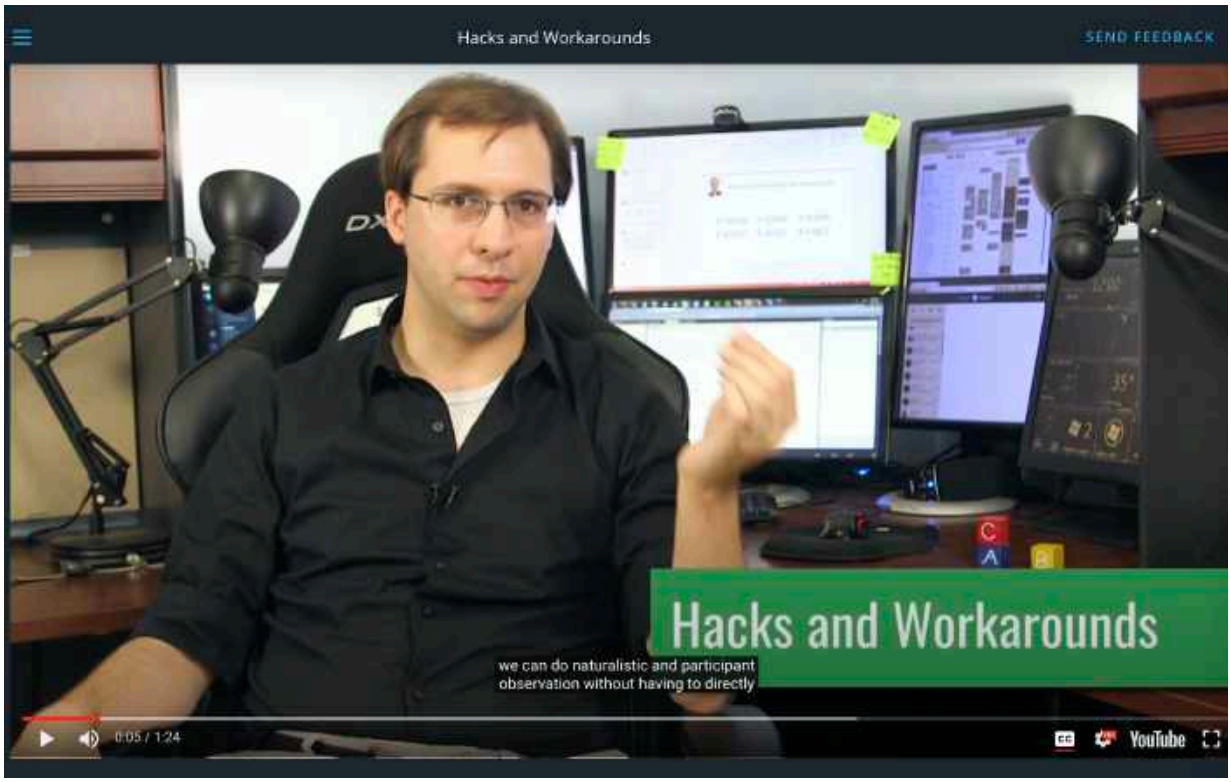

Facebook
www.facebook.com
User Types
SEND FEEDBACK
Kids vs. Adults
Exercise Experts vs. Novices
Audiobook Experts vs. Novices
They differentiate whether I'm designing for business people who want to be able to
0:34 / 1:13
YouTube


5 Tips: Avoiding Bias in Needfinding
SEND FEEDBACK
1. Confirmation bias
2. Observer bias
3. Social desirability bias
4. Voluntary response bias
5. Recall bias
Now, these biases can be largely controlled also
YouTube

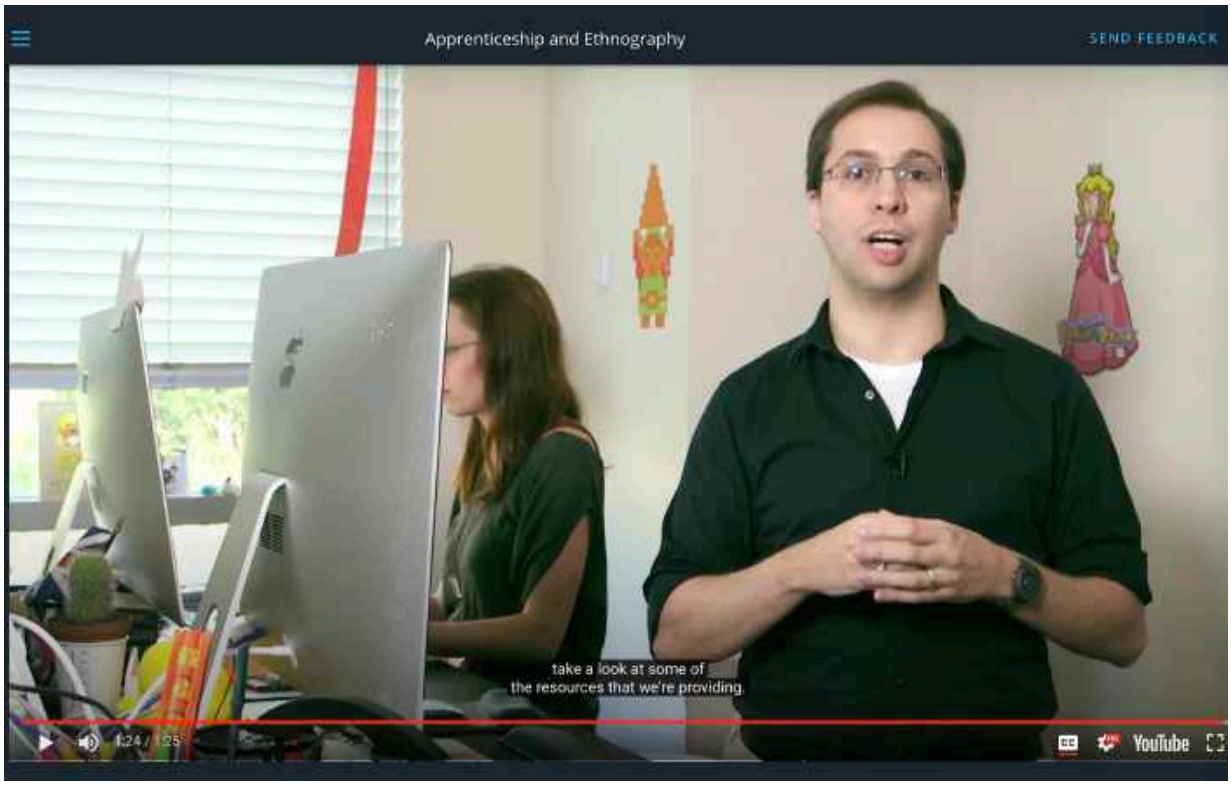

Naturalistic Observation
SEND FEEDBACK
Naturalistic Observation
us to understand the users need is to simply watch.
0:02 / 2:12
YouTube


5 Tips: Naturalistic Observation
SEND FEEDBACK
1. Take notes
2. Start specific, then abstract
3. Spread out your sessions
4. Find a partner
5. Look for questions
ask participants in more targeted need-finding exercises.
1:06 / 1:15
YouTube

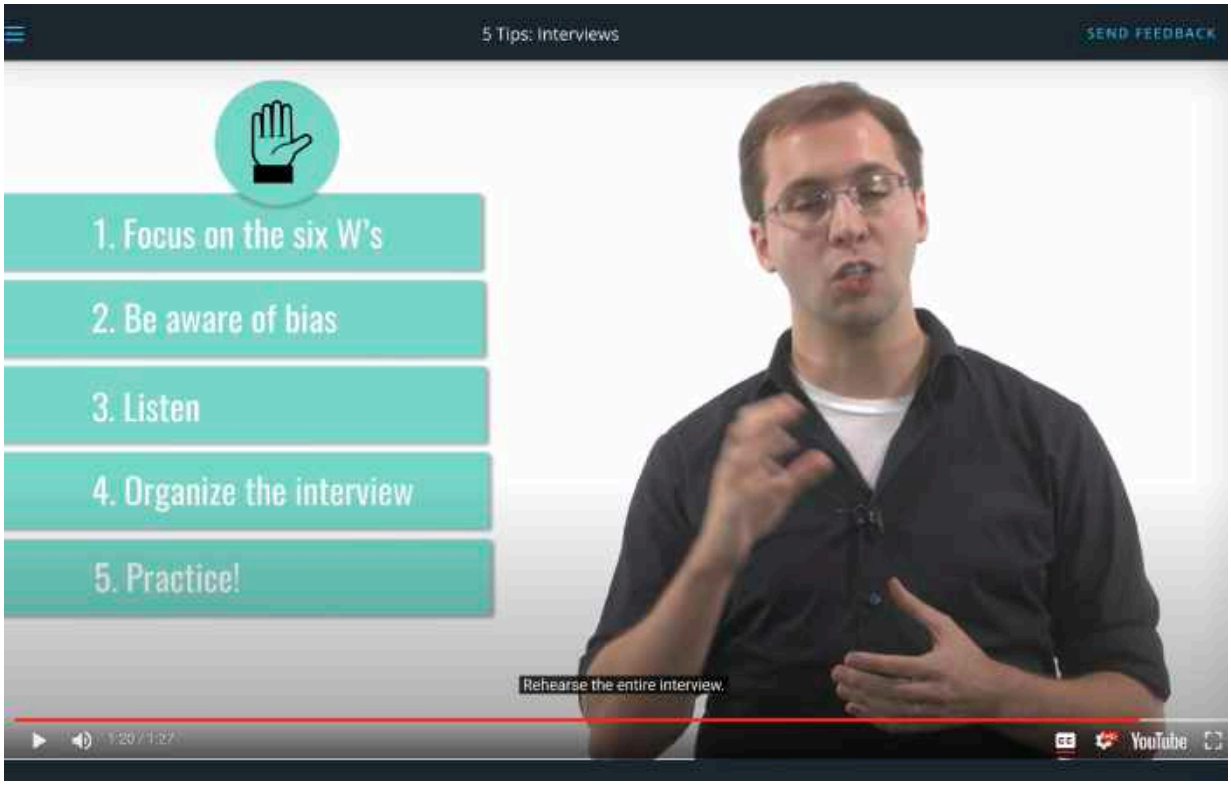

Participant Observation
SEND FEEDBACK
"You are not your user!"
When you're working as a participant observer, you can avail useful insights.
1:09 / 1:20
YouTube

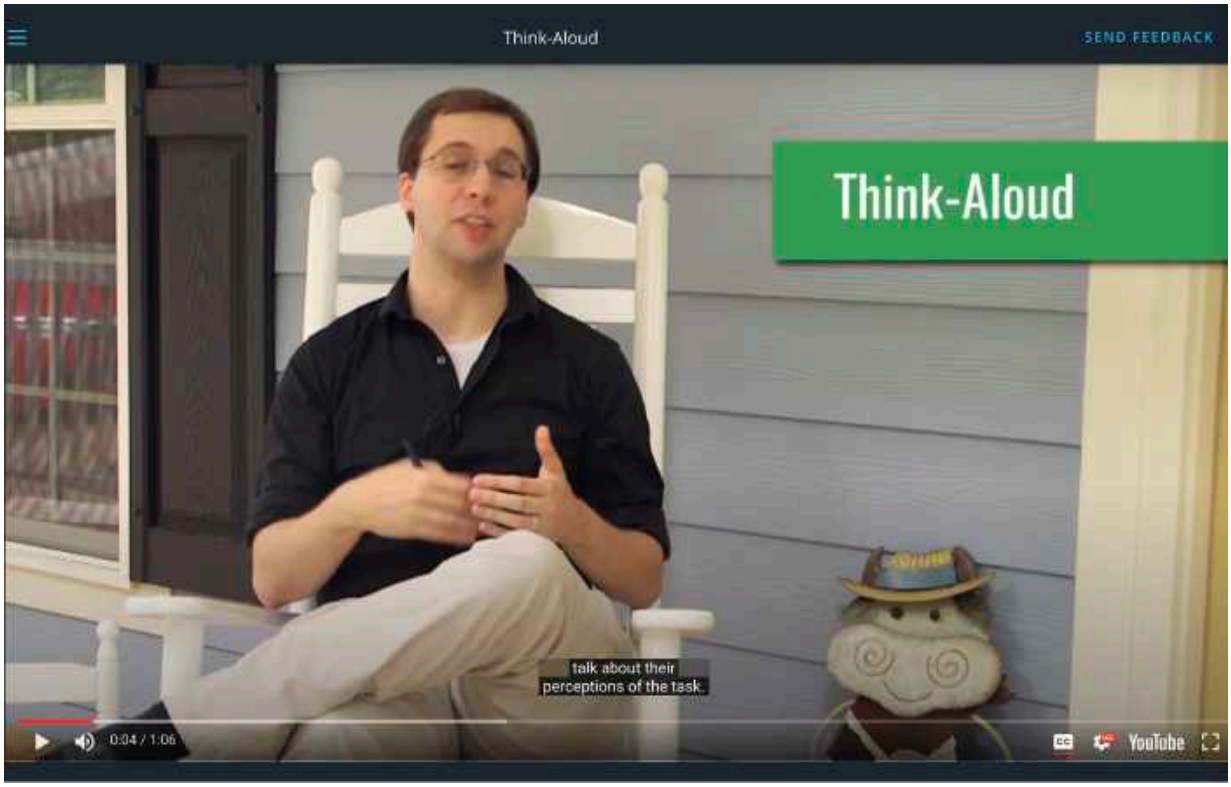

Hacks and Workarounds
SEND FEEDBACK
Hacks and Workarounds
we can do naturalistic and participant
observation without having to directly
0:05 / 1:24
YouTube

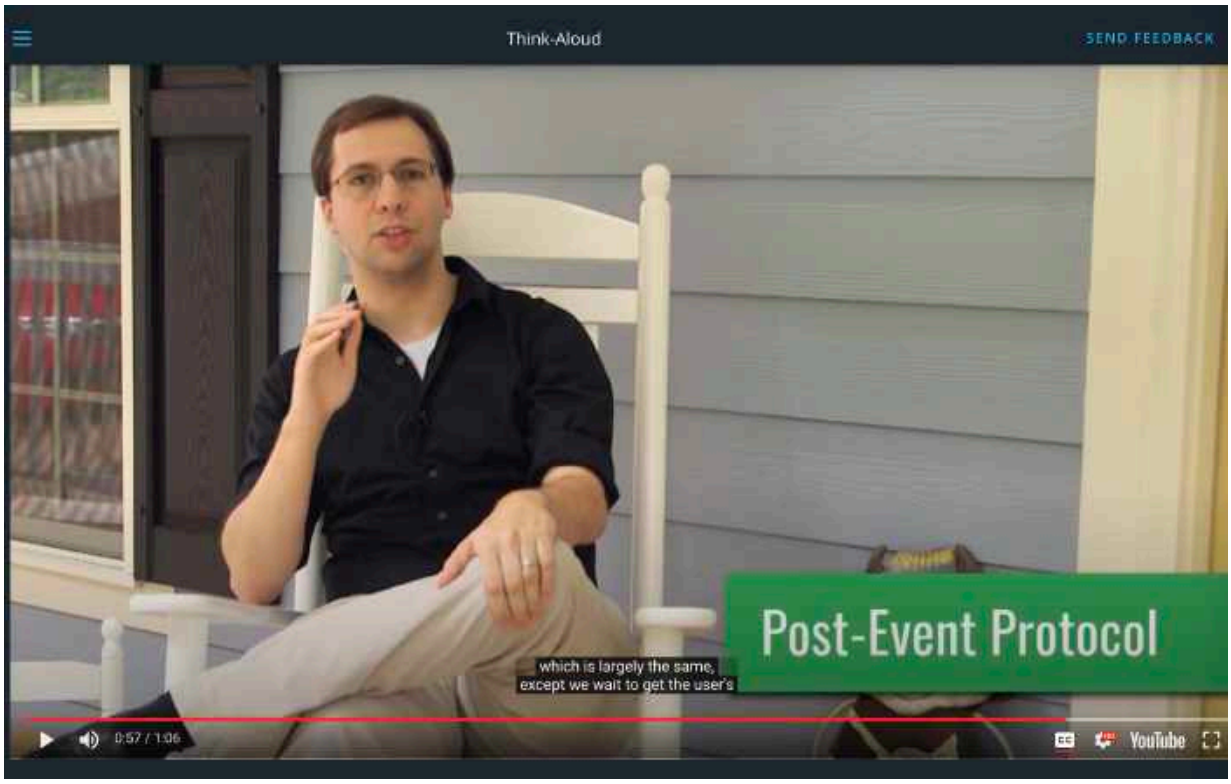

Errors
SEND FEEDBACK
Lesson 2.6: Errors
but we can also use those errors to understand a bit more about the user's mental model.
0:08 / 2:11
YouTube

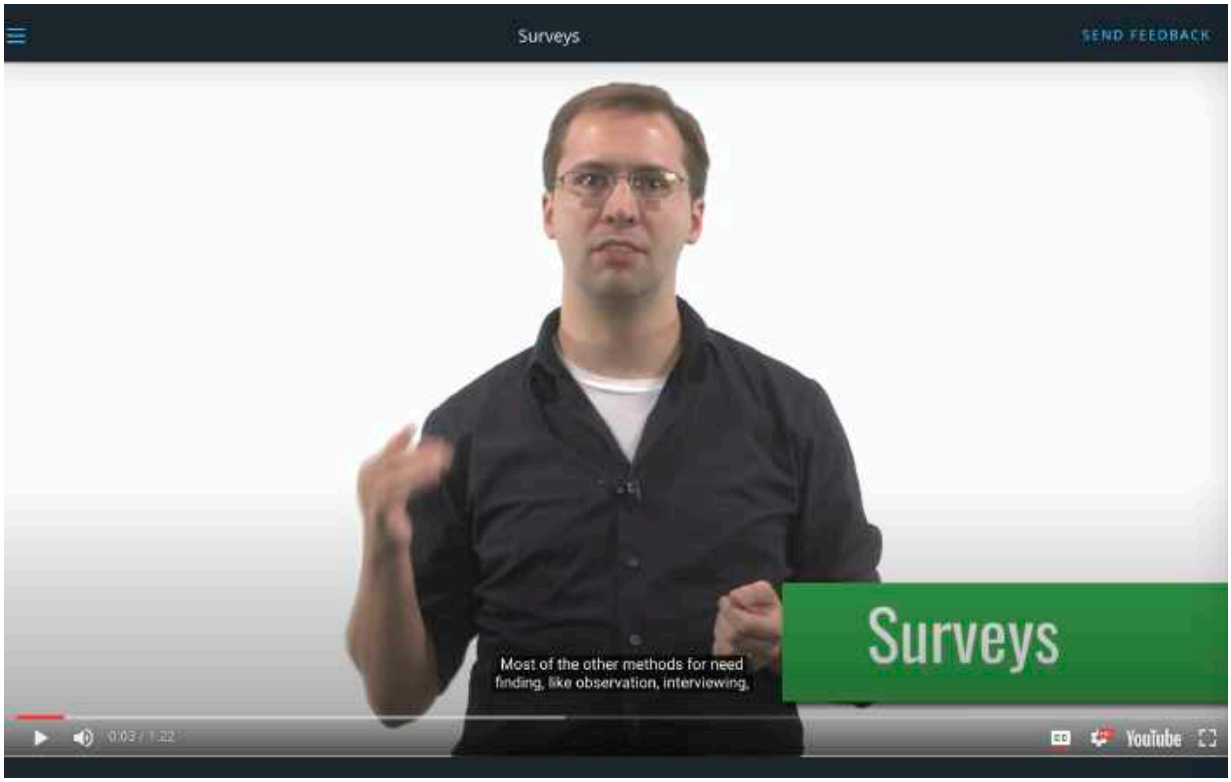


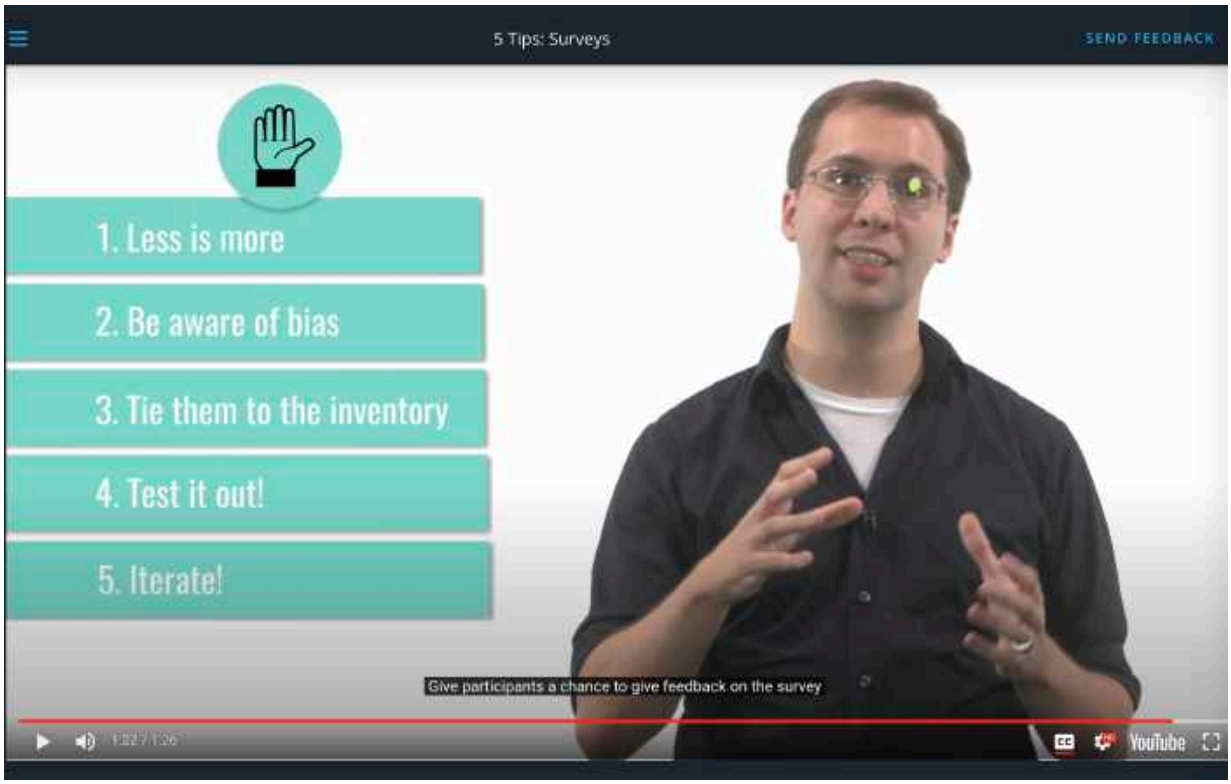
Who what where when and how


5 Tips: Interviews
SEND FEEDBACK
1. Focus on the six W's
2. Be aware of bias
3. Listen
4. Organize the interview
5. Practice!
Rehearse the entire interview.
YouTube

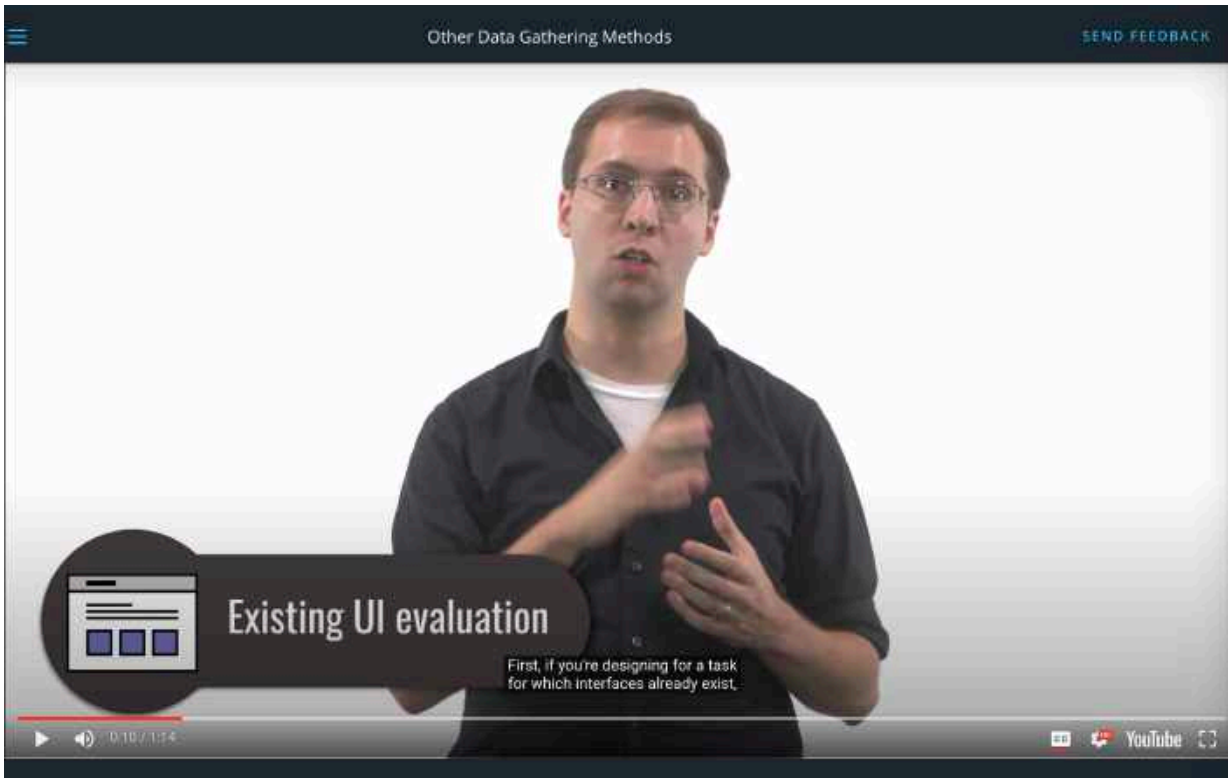

Think-Aloud
SEND FEEDBACK
Think-Aloud
talk about their
perceptions of the task.
0:04 / 1:06
YouTube


Think-Aloud
SEND FEEDBACK
which is largely the same,
except we wait to get the user's
Post-Event Protocol
0:57 / 1:06
YouTube

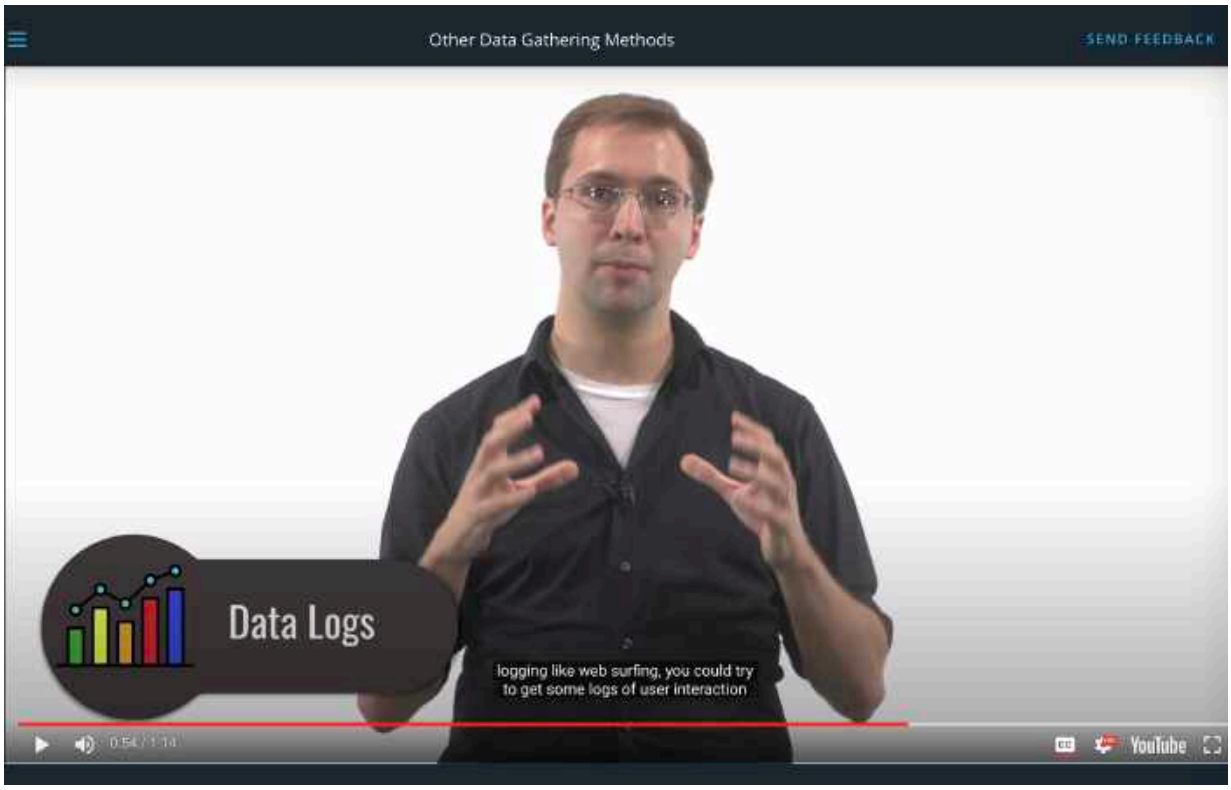

Surveys
SEND FEEDBACK
Most of the other methods for need
finding, like observation, interviewing,
Surveys
YouTube

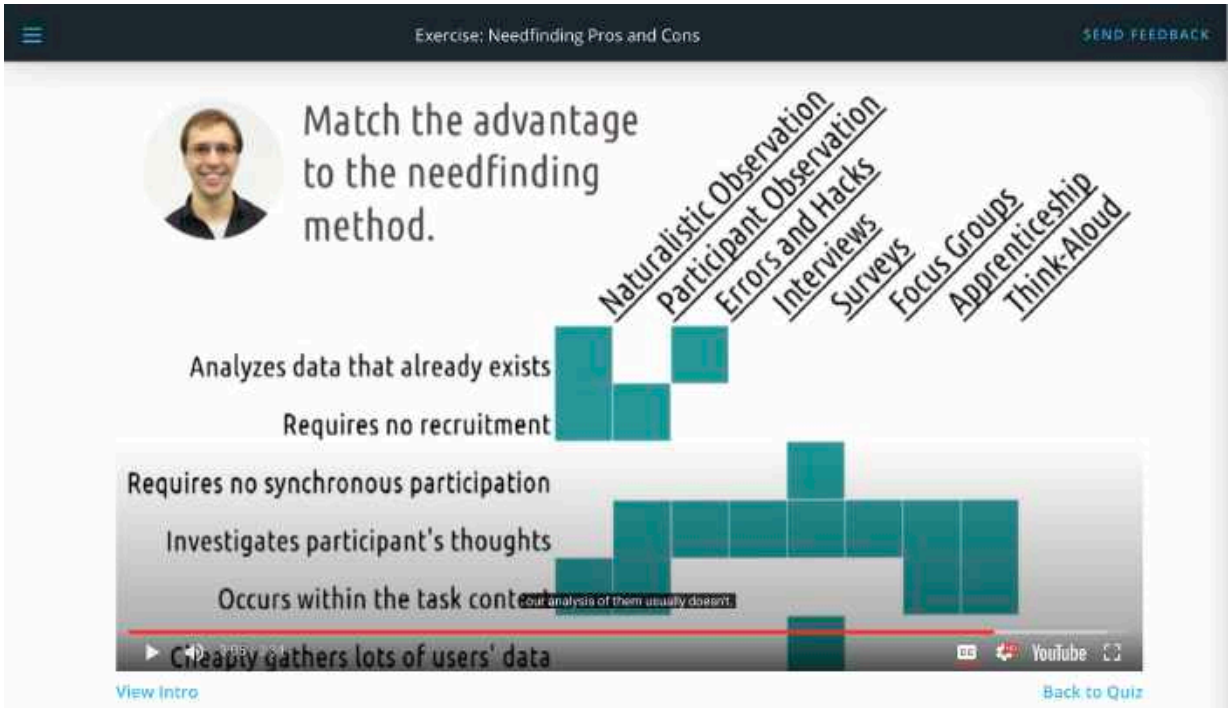

5 Tips: Surveys
SEND FEEDBACK
1. Less is more
2. Be aware of bias
3. Tie them to the inventory
4. Test it out!
5. Iterate!
Give participants a chance to give feedback on the survey
YouTube

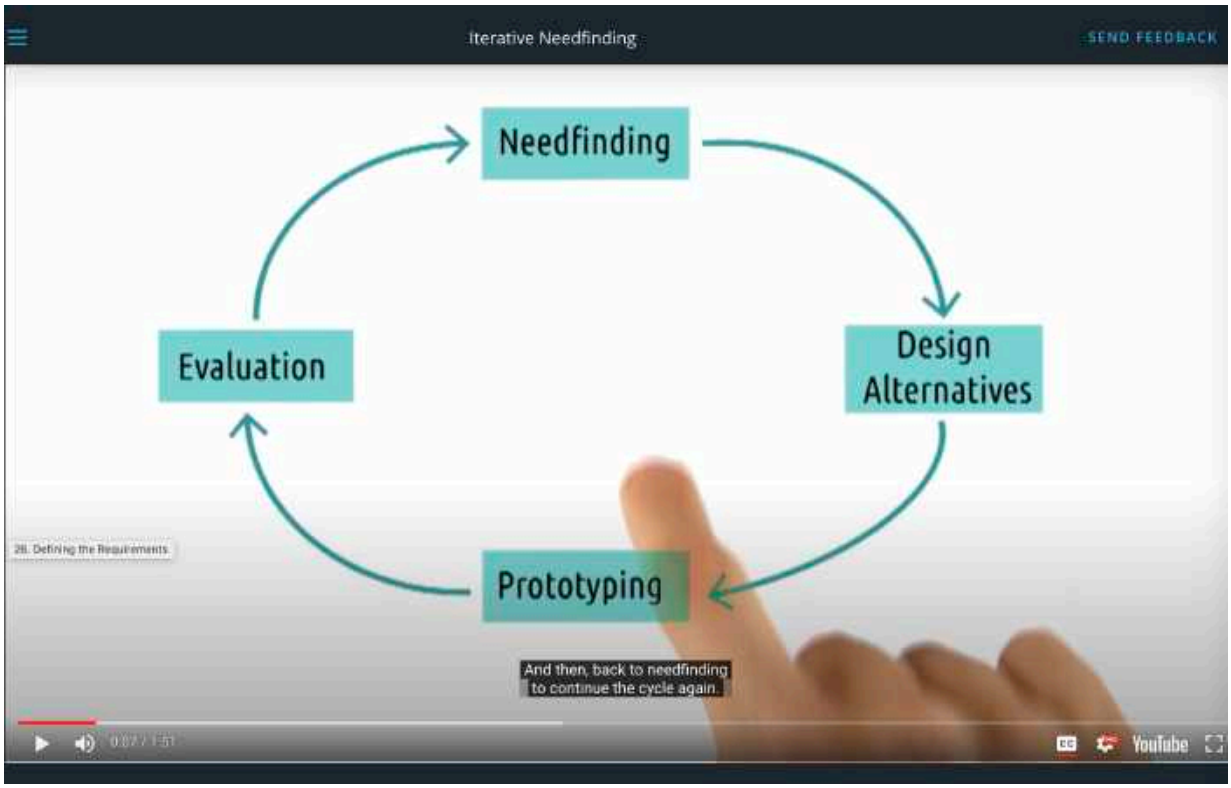

Writing Good Survey Questions
SEND FEEDBACK
Be Clear
Be Concise
Be Specific
Be Expressive
Be Unbiased
Be Usable
but they're only useful if the questions are actually well-written.
YouTube

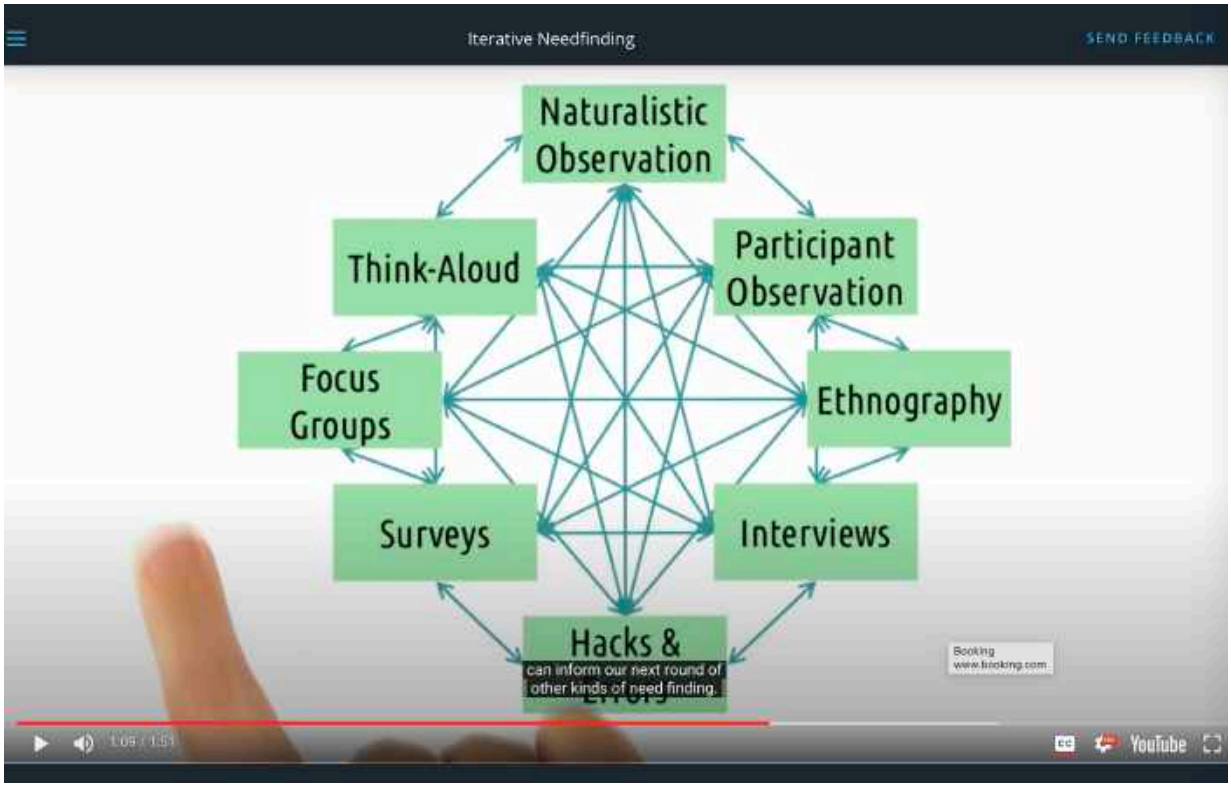

Other Data Gathering Methods
SEND FEEDBACK
Existing UI evaluation
First, if you're designing for a task
for which interfaces already exist,
YouTube

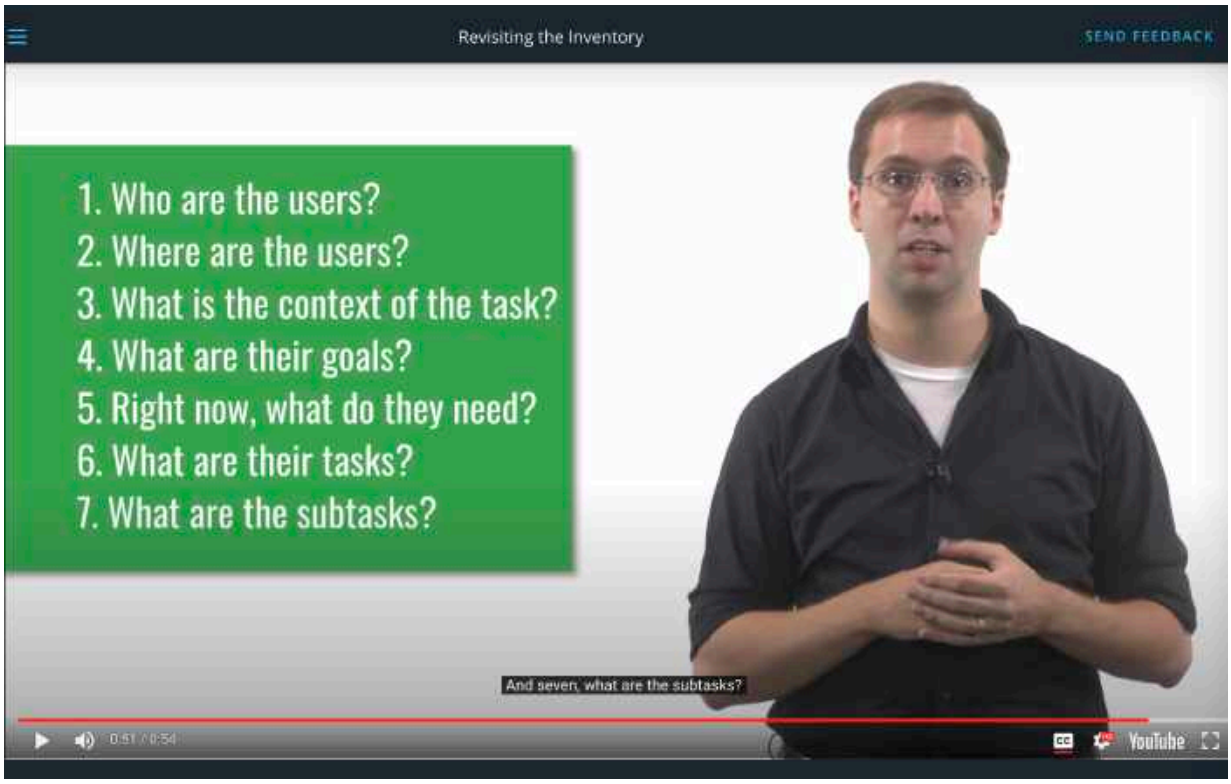

Other Data Gathering Methods
SEND FEEDBACK
Product Reviews
a problem that people that are already
addressing, you might go look at user
YouTube


Other Data Gathering Methods
SEND FEEDBACK
Data Logs
logging like web surfing, you could try to get some logs of user interaction
YouTube


Exercise: Needfinding Pros and Cons
SEND FEEDBACK
Match the advantage to the needfinding method.
Naturalistic Observation
Participant Observation
Errors and Hacks
Interviews
Surveys
Focus Groups
Apprenticeship
Think-Aloud
Analyzes data that already exists
Requires no recruitment
Requires no synchronous participation
Investigates participant's thoughts
Occurs within the task cont
out analysis of them usually doesn't.
Cheaply gathers lots of users' data
YouTube
View Intro
Back to Quiz

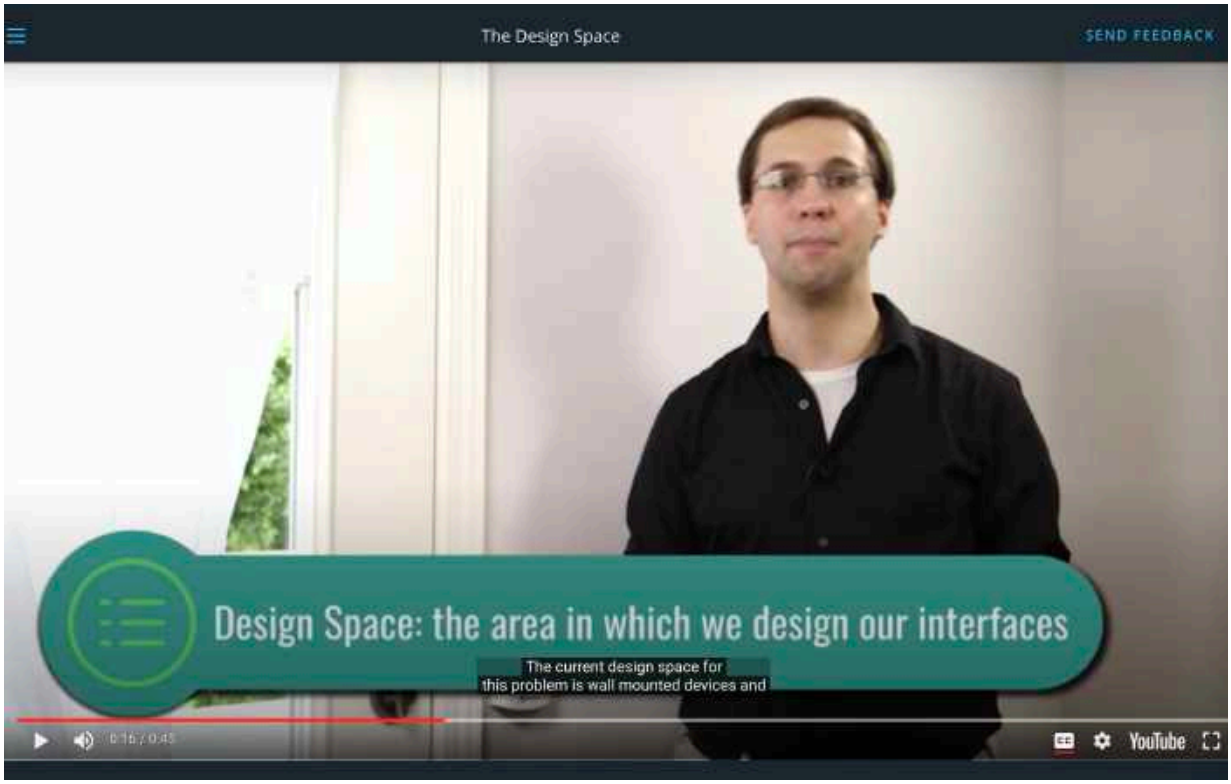

Iterative Needfinding
SEND FEEDBACK
Needfinding
Design Alternatives
Prototyping
Evaluation
28. Defining the Requirements
And then, back to needfinding to continue the cycle again.
YouTube

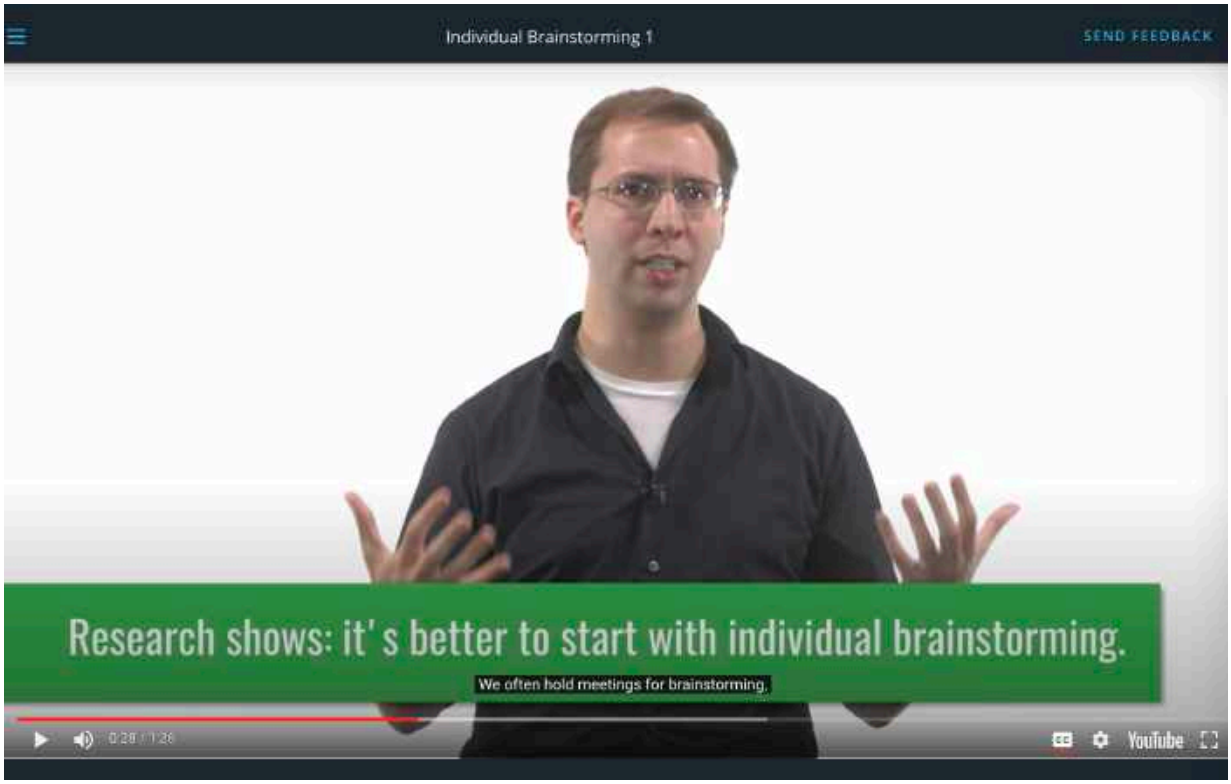

Iterative Needfinding
SEND FEEDBACK
Naturalistic Observation
Think-Aloud
Participant Observation
Focus Groups
Ethnography
Surveys
Interviews
Hacks &
can inform our next round of other kinds of need finding.
Booking
www.booking.com
YouTube



Functionality
Usability
Learnability
Accessibility
Compatibility
Compliance
Cost

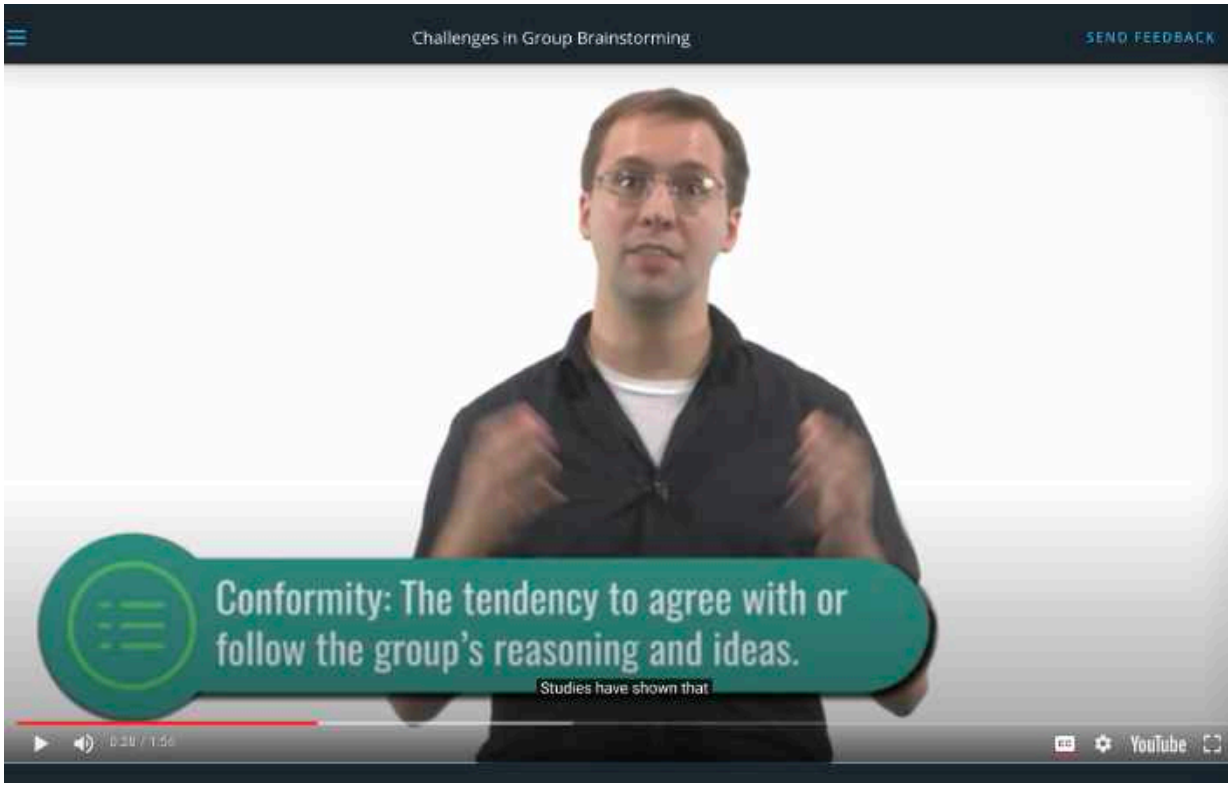

The Second Biggest Mistake
SEND FEEDBACK
Needfinding
Design Alternatives
Prototyping
Evaluation
The second biggest mistake though is
settling on a single design idea or
YouTube


The Design Space
SEND FEEDBACK
Design Space: the area in which we design our interfaces
The current design space for
this problem is wall mounted devices and
YouTube


Individual Brainstorming 1
SEND FEEDBACK
Research shows: it' s better to start with individual brainstorming.
We often hold meetings for brainstorming.
YouTube

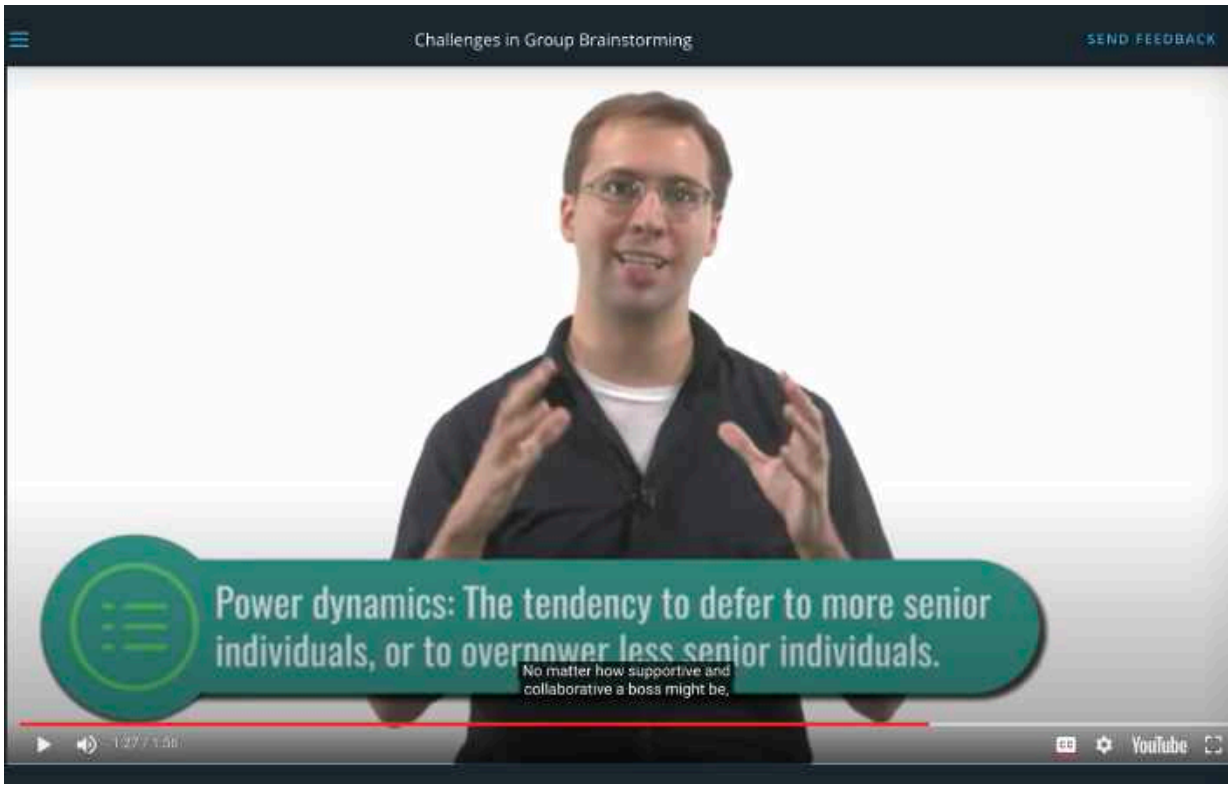

5 Tips: Individual Brainstorming
SEND FEEDBACK
1. Write down the core problem
2. Constrain yourself
3. Aim for 20
4. Take a break
5. Divide and conquer
brainstorm solutions to each individual little problem.
YouTube


Challenges in Group Brainstorming
SEND FEEDBACK
Social Loafing: A The tendency to exert less effort working in groups than working alone.
People often don't tend to work as hard in groups as they would individually.
Music
YouTube


Challenges in Group Brainstorming
SEND FEEDBACK
Conformity: The tendency to agree with or follow the group's reasoning and ideas.
Studies have shown that
YouTube

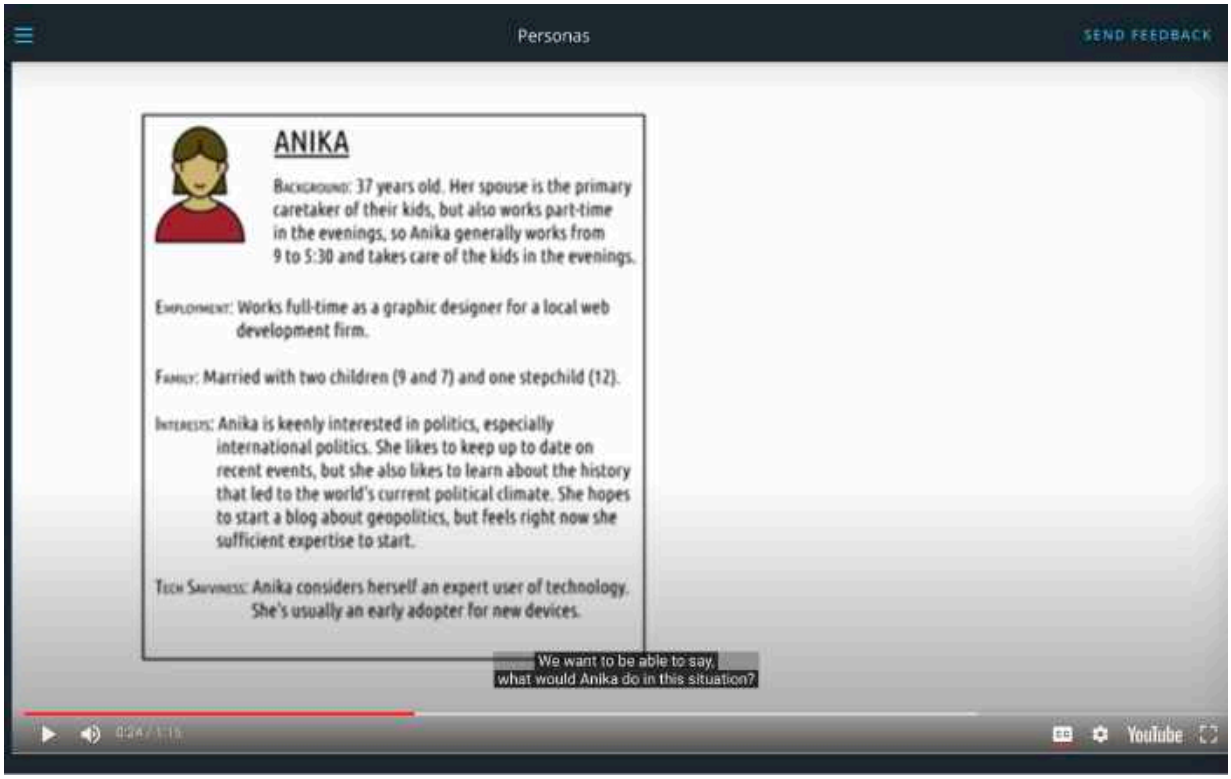

Challenges in Group Brainstorming
SEND FEEDBACK
Notes
Production Blocking: The tendency of some individuals in discussions to block other individuals' participation.
In group brainstorming, there are often individuals who dominate
YouTube

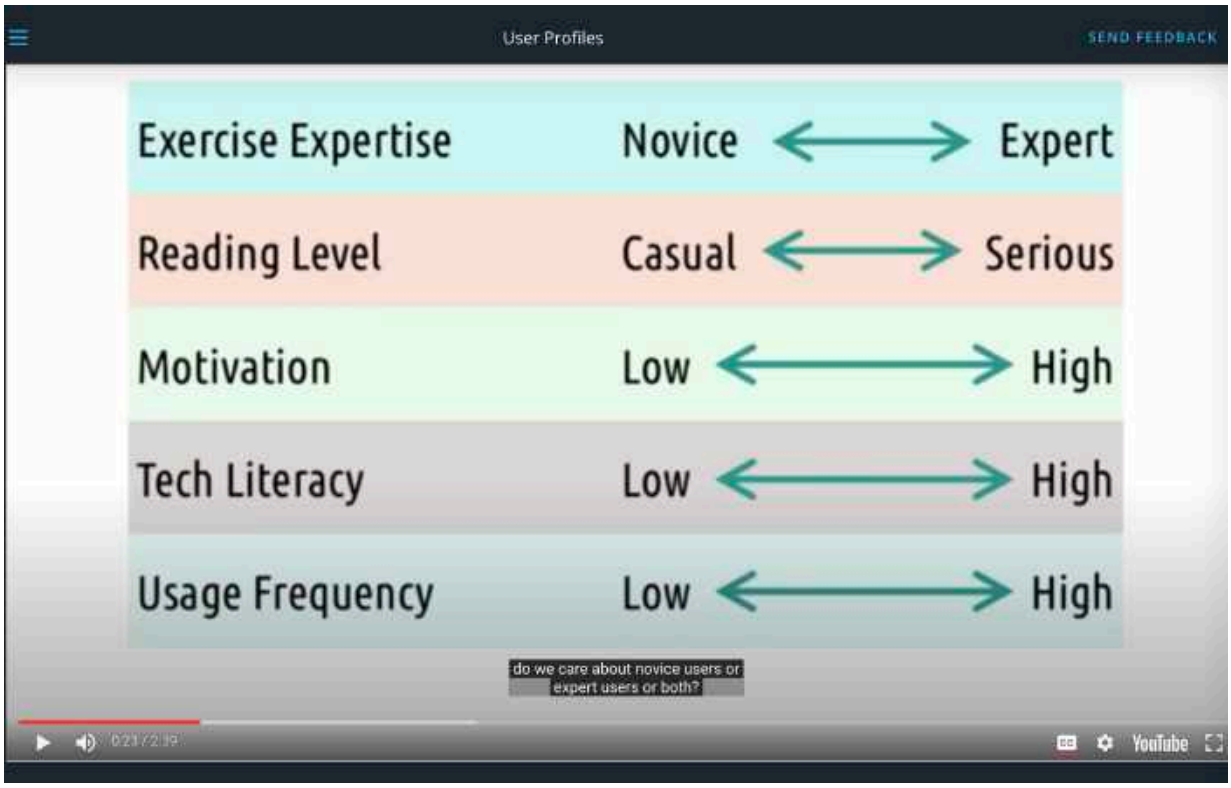

Challenges in Group Brainstorming
SEND FEEDBACK
Performance Matching: The tendency to match one's level of performance to other collaborators'
People tend to converge in terms of passion and performance,
YouTube

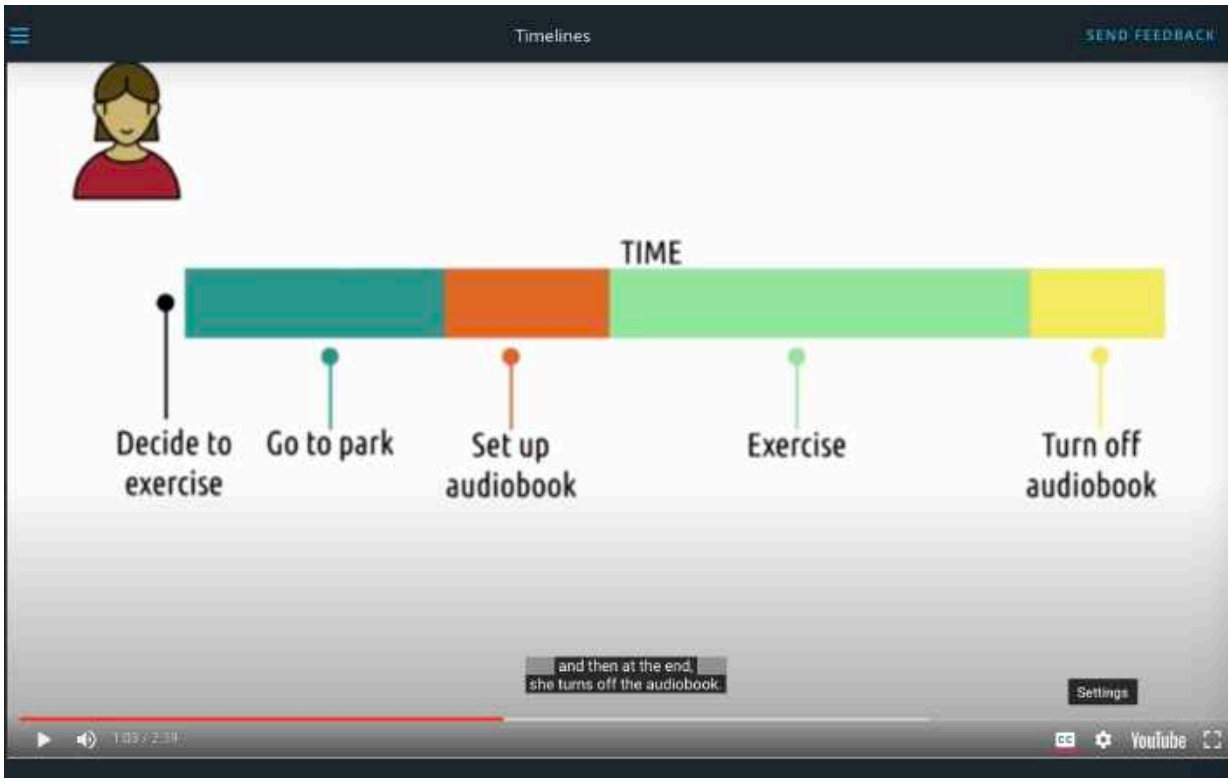


Expressiveness
Nonevaluation
Quantity
Building
Stay focused
No explaining ideas
Revisit the problem
Encourage others

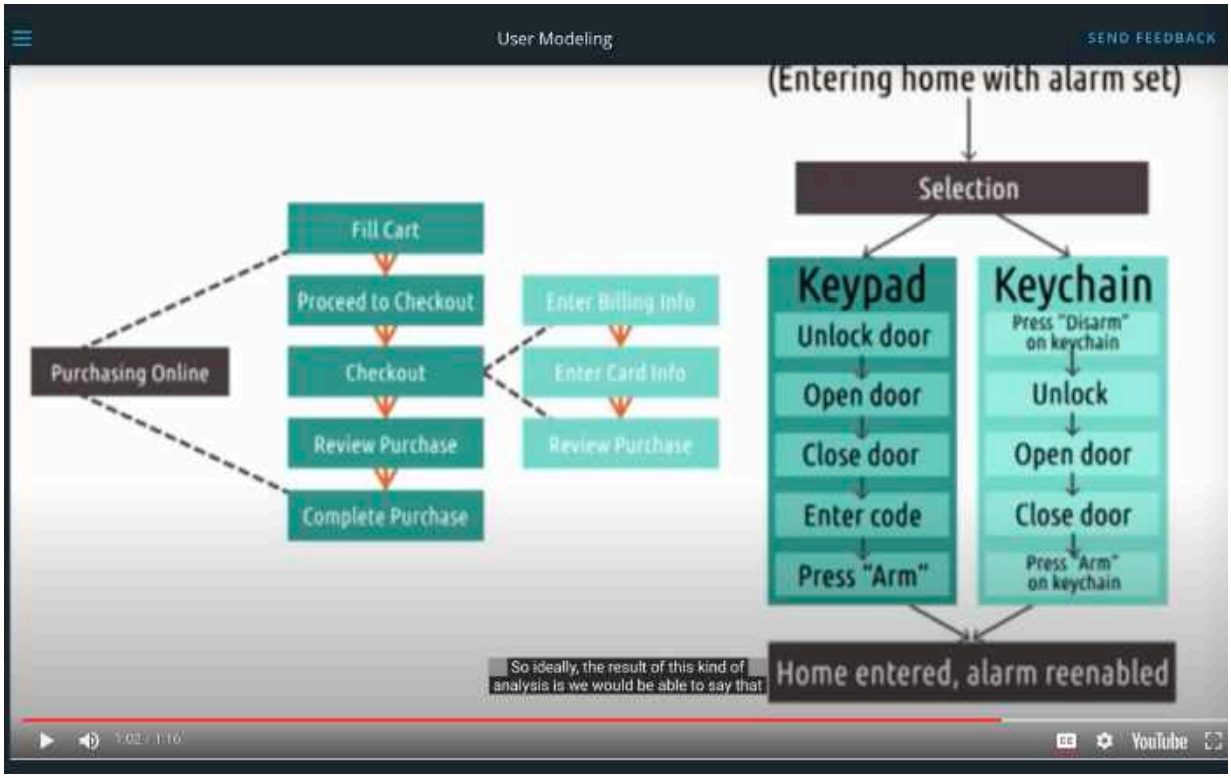

5 Tips: Group Brainstorming
SEND FEEDBACK
1. Go through every individual idea
2. Find the optimal size
3. Set clear rules for communication
4. Set clear expectations
5. End with ideas, not decisions
before coming back and choosing the ideas to pursue later.
YouTube


Personas
SEND FEEDBACK
ANIKA
Background: 37 years old. Her spouse is the primary caretaker of their kids, but also works part-time in the evenings, so Anika generally works from 9 to 5:30 and takes care of the kids in the evenings.
Employment: Works full-time as a graphic designer for a local web development firm.
Family: Married with two children (9 and 7) and one stepchild (12).
Interests: Anika is keenly interested in politics, especially international politics. She likes to keep up to date on recent events, but she also likes to learn about the history that led to the world's current political climate. She hopes to start a blog about geopolitics, but feels right now she sufficient expertise to start.
Tech Savviness: Anika considers herself an expert user of technology. She's usually an early adopter for new devices.
We want to be able to say,
what would Anika do in this situation?
YouTube


User Profiles
SEND FEEDBACK
Exercise Expertise
Novice
Expert
Reading Level
Casual
Serious
Motivation
Low
High
Tech Literacy
Low
High
Usage Frequency
Low
High
do we care about novice users or expert users or both?
0:21 / 2:39
YouTube


Timelines
SEND FEEDBACK
TIME
Decide to exercise
Go to park
Set up audiobook
Exercise
Turn off audiobook
and then at the end, she turns off the audiobook.
Settings
1:03 / 2:39
YouTube


Scenarios and Storyboards
SEND FEEDBACK
could actually be a video mockup of what it would be like to use the finished product.
2:38 / 2:42
YouTube


User Modeling
SEND FEEDBACK
(Entering home with alarm set)
Selection
Keypad
Unlock door
Open door
Close door
Enter code
Press "Arm"
Keychain
Press "Disarm" on keychain
Unlock
Open door
Close door
Press "Arm" on keychain
Home entered, alarm reenabled
Purchasing Online
Fill Cart
Proceed to Checkout
Checkout
Review Purchase
Complete Purchase
Enter Billing Info
Enter Card Info
Review Purchase
So ideally, the result of this kind of analysis is we would be able to say that
1:02 / 1:10
YouTube